

# Finnish as a second language in Early Childhood Education and Care: unlocking bottlenecks and discovering development ideas using service design techniques



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Day care works as a channel for early integration of foreign background children into Finnish society. Increasing numbers of foreign background children in day care centers of Espoo poses serious challenges for municipality authorities responsible for Early Childhood Education and Care professionals (ECEC) and day care services. This includes successful training of children of new arrivals with Finnish as second language (F2) to ensure their successful integration into Finnish society.

The aim of this study is to explore experiences, needs, concerns, challenges and offer ideas for future development of the F2 service in Finnish language day care centers of Espoo. Perspectives both of service providers (day care professionals) and service end-users (foreign background parents) are examined. Additionally, the service design techniques are utilized for improvement of F2 instruction as a public service.

The theoretical basis of this study is formed around concepts of second language learning, design thinking, service design and early childhood education. The informant-respondents consist of three groups: five foreign background parents, being first generation immigrants, who detail their children's F2 experiences in Espoo day care; three Early Childhood Education and Care (ECEC) professionals closely working with Finnish as a second language; and one service design expert. The data collection for this study was mainly through face-to-face interview techniques (parents and service design expert) and questionnaires sent by e-mail (ECEC professionals). The volumes of qualitative data were analyzed using an affinity diagram method and thematic analysis.

The findings of this study indicate that parents and ECEC professionals have found consensus on many points. Nonetheless, multiple bottlenecks and challenges were discovered. Service delivery revealed problematic issues between real needs and expectations. A key finding was regarding the critical need for small F2 group formation based on size and similar ages of children within each group. Other results included adequate mother tongue support, better qualifications for F2 staff and increasing resources of day care system. It is the hope of authors that this will lead to new and innovative development ideas for improvements to Finnish as a second language service at the day care level. We recommend that the City of Espoo examine these ideas for the possibility of implementation.

**Keywords:** *Finnish as a second language (F2), early childhood education and care, service design, design thinking, second language acquisition.*

Ryynänen-McEwan, Eila & Poletaeva, Polina

**Suomi toisena kielenä opetus varhaiskasvatuksessa: palvelun pullonkauloja ja kehitysideoita palvelumuotoilun tekniikoita hyödyntämällä**

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Päivähoito toimii varhaisena kanavana ulkomaalaistaustaisten lasten integroimisessa yhteiskuntaan. Nopea ulkomaalaistaustaisten lasten osuuden kasvu lisää Espoon viranomaisten ja varhaiskasvatuksen ammattilaisten haastetta järjestää sellaiset päivähoitopalvelut, joiden avulla voidaan varmistaa lukuisten ulkomaalaistaustaisten lasten Suomi toisena kielen oppiminen menestyksellisesti. Tämä käsittää onnistuneen Suomi toisena kielenä opettamisen (S2) uusien tulokkaiden integroimiseksi menestyksekkäästi suomalaiseen yhteiskuntaan.

Tutkimuksen tavoitteena oli tutkia kokemuksia, tarpeita, huolia, haasteita S2 opetuksesta sekä ja tarjota ideoita S2 opetuksen kehittämiseksi Espoon päiväkodeissa. Sekä palveluntarjoajien (päivähoidon S2 ammattilaiset) että palvelun käyttäjien näkökulmat otettiin huomioon. Myös palvelumuotoilun tekniikoita julkisten palvelujen, erityisesti S2 palvelujen kehittämisessä tutkittiin.

Teoreettinen viitekehykseen sisältyy toisen kielen oppimisen, muotoiluajattelun, palvelumuotoilun sekä varhaiskasvatuksen käsitteet. Tutkimukseen vastaajat koostuvat kolmesta ryhmästä: ulkomaalaistaustaisista vanhemmista, jotka ovat ensimmäisen sukupolven maahanmuuttajia, joiden lapset ovat osallistuneet äskettäin S2 opetukseen Espoon kaupungin päivähoidossa; Espoon kaupungin varhaiskasvatuksen S2 ammattilaisista sekä palvelumuotoilun asiantuntijasta. Laadullinen tutkimustieto kerättiin face-to-face haastattelujen (vanhemmat ja palvelumuotoilun asiantuntija) ja sähköpostitse lähettävän kyselytutkimuksen (varhaiskasvatuksen S2 ammattilaiset) avulla. Kerättyä tietoa analysoitiin käyttäen samankaltaisuuskaaviota sekä tee-moittelyn analyysiä.

Tämän tutkimuksen tulokset osoittavat, että vanhemmat ja varhaiskasvatuksen S2 ammattilaiset ovat yhtä mieltä monista asioista, mutta silti Espoon varhaiskasvatuksen S2 opetuksessa on useita pullonkauloja ja haasteita. Palvelutarjonnassa löytyi ongelmakohtia todellisten tarpeiden ja odotusten välillä. Keskeinen havainto oli ehdoton tarve sellaisten F2 opetusryhmien järjestämiseksi, jotka perustuvat pieneen kokoon ja lasten ikään ryhmässä. Muut tulokset koskivat riittävää äidinkielen tukemista, parempaa F2 henkilöstön pätevyyttä ja päivähoitojärjestelmän resurssien lisäämistä. Toivomme löydösten johtavan uusiin ja innovatiivisiin kehitysideoihin Suomi toisena kielenä päivähoito palvelun parantamiseksi päivähoidossa. Suosittelemme että Espoon kaupunki tutustuu tutkimustuloksiin.

*Asiasanat: Suomi toisena kielenä opetus (S2), varhaiskasvatus, palvelumuotoilu, muotoiluajattelu, toisen kielen oppiminen.*

## Glossary and abbreviations

**Bilingual** — refers to people using two or more languages to operate in everyday life.

**Children of new arrivals (CNA)** — are children born from new arrival parents. For our research we selected new arrival parents on behalf of their children. It is possible that the children of new arrivals are actually born in Finland or outside the country. However, they do not speak Finnish or Swedish, thus CNA require F2 instruction.

**Consecutive or sequential bilingualism** — denotes later acquisition of the second language, after the mother tongue is more or less developed (Baker 2011, 94). The vague border between simultaneous and consecutive bilingualism is the age of 3 to 4 years old.

**Customers** — are defined as individuals receiving, experiencing through their children the F2 services provided. Customers are equivalent to **service users** and **end-users**.

**Early childhood education and care (ECEC)** — is applied according to OECD report, to 0 - 6 years of age children. It also includes 'specific pre-school education' for 6 year old children. Early childhood education and care, ECEC refers to 'care, education and instruction' provided at public day care centers in Finland. (OECD 2000, 28).

**F2 acquisition** — refers to the process of learning the Finnish language by children of new arrivals helping them to develop fluency.

**F2 kindergarten teachers or F2 professionals** — refer to all ECEC professionals participating or closely related to F2 instruction. For example, these include early childhood education teachers, assistants, caregivers, F2 managers, F2 itinerant kindergarten teachers and special education teachers working in a public day care.

**F2 service providers** — refer to organizations and staff providing F2 services for their customers. **Service providers** are the stakeholders viewed in the context of ECEC in Espoo such as decision-makers, F2 teachers, ECEC teachers...et cetera.

**Finnish as a second language (F2)** — refers to F2 teaching, F2 instruction or F2 services meant for those whose mother tongue is not Finnish or Swedish.

**Foreign background people** — is a term used as analogue of the Finnish word, *maahanmuuttaja*, referring to immigrants moving into Finland from abroad.

**Functional bilingualism** — does not imply perfect mastery of both languages. However, the bilingual person is able to understand almost everything heard or read and produce sufficiently coherent speech and written texts, so that they are “able to conduct all of their activities in a dual linguistic environment satisfactorily” (Baetens Beardsmore 1986, 15-16).

**Mother tongue** — is defined as the first language the child learns at home before starting day care.

**New arrival families** — cover the spectrum of a modern family. Please note that our research did not investigate families, where one parent is a Swedish speaking Finn. Thus, our study does not examine the needs of Swedish speaking Finns.

**New arrival parents (NAP)** — refers to adult parents, immigrants to Finland.

**New arrivals** — are foreign background people, but at times both terms are used. The preceding three terms are used instead immigrants, perceived more positively with less stigmatization.

**Service users and end-users** — refer to people using F2 services, influencing it and receiving some value from it. As previously mentioned, the service end-users are new arrival parents on behalf of their children, who are learning Finnish as a second language.

**Second language and foreign language** — are defined as any language, which is not the mother tongue of a person or national language of a country. Quite often they are used as interchangeable synonyms, both referring to any language that is being learned after the mother tongue. However, at the same time many linguists separate terms “foreign” and “second language,” by the context where the learning of the language takes place. The term “second language” refers to the situation where one learns the language in a country, where that language is used as a means of everyday communication. On the contrary, the term “foreign language” refers to the situation, when one learns the language not being used for the routine communication in a country on some language courses. (Crystal 2010, 388).

**Simultaneous bilingualism** — refers to infant bilingualism, or it may refer to bilingual first language acquisition (De Houwer 2009, cited in Baker 2011, 94) describing when a child learns both languages from the birth.

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## 1 Introduction

Have you ever wondered how a Kurdish family emigrating from Iraq to an Arctic country like Finland, learned one of the most difficult languages on the Finno-Ugric language branch? Our study investigates a wide array of difficulties encountered by new immigrants arriving from many different countries and their children integration into Finnish culture. In essence this study is about the quest of children of new arrivals or foreign background children in learning Finnish as a second language.

Multiculturalism is part of a continuing globalization trend in Finnish society. Finnish everyday life is becoming more international. The amount of foreign-born people living in Finland has increased dramatically (Vesterinen 2011, 170). The quicker and the more efficiently foreign background people become integrated into the Finnish way of life, the more likely they are to contribute to Finnish society. The authors prefer to use the term new arrivals however we use foreign background parents as synonymous terms. Learning one of the state languages - Finnish or Swedish - may be considered to be the most important part of integration. Integration is necessary for all family members, adults and children. Day care and other social services can be also considered as key channels in supporting the integration of families into the Finnish way of life (Ministry of Employment 2006, 20).

The aim of our research is to assess the service of Finnish as second language, or F2 teaching provided to the children of foreign background parents or new arrivals, within the system of early childhood education and care (ECEC) of the City of Espoo. In order to achieve this objective, the authors enlisted the support of the staff of Kivenkolo Community Center. The staff allowed us to comingle with new arrival parents and their children to win their trust as the end-users of F2 service. It is our contention that utilization of select service design techniques can assist researchers in uncovering bottlenecks, challenges and developmental ideas in the delivery system of F2 instruction. These methods may be combined with face-to-face interviews and questionnaires involving both service end-users, stakeholders and including an outside expert.

This study reveals how utilizing service design techniques such as co-design, directed storytelling, customer experience maps and affinity diagrams maybe used to furnish relevant ideas for ECEC decision-makers to improve F2 service provision. The language of the land is a 'learning tool' in a new culture. Through language, the new arrival child's potential to adapt to their environment will improve (Paavola 2007, 43). Culture shock or stress that parents experience may be eased by the facilitation of high-quality services, and by what is called 'encountering' the children and families individually. This in turn will flow to the benefit of the child (Ministry of Social Affairs and Health 2007, 26).

The main objective of this study was to assess the public service of Finnish as second language instruction provided to children of new arrivals in the setting of a day care in the City of Espoo. The main research questions cited below helped to ascertain the current situation of F2 teaching in the context of Espoo to discover bottlenecks, challenges and new ideas in the F2 service provision.

The main research questions and a sub-question are stated below (and are to be applied to different groups of respondents):

1. What are foreign background parents' needs, experiences, concerns and ideas for development in F2 teaching (on behalf of their children) as the end-users?
2. What are F2 ECEC professionals' needs, experiences, challenges and ideas for development in F2 instruction as the stakeholders?
  - a. What are the realities of applying service design methods in the public sector, especially from the perspective of a service design expert?

In order to achieve the goal of our research our intention was to interview representatives of three different groups. First, five foreign background parents or new arrival parents immigrated to Finland, whose children did not know Finnish language before starting day care center; second, three ECEC teachers working with Finnish as a second language and other F2 professionals and third, a service design expert.

## 2 Thesis background

Data collected by the Official Statistics of Finland, in 2013 showed that the population of Finland increased by 24,596 persons. Ninety percent of new residents, (immigrants) in Finland constituted native speakers of languages other than Finnish or Swedish equaling 22,119 persons. By the end of 2013, the population of foreign language speakers was estimated to be 289,068 persons. This is almost equal to total number of Finland's Swedish speakers equaling 290,910 persons. (Official Statistics of Finland 2014a).

In 2013, the age group between birth and four years old (0–4) of foreign language children, living in Finland equaling 19,575 exceeded the total amount of native Swedish speakers of the same age group equaling 17,347. In the Capital Region, the Province of Uusimaa, the age group between birth and four years old (0-4) of foreign language children was proportionally higher, for example, 11,377 compared to Swedish language speakers of the same age group equaling 8,026. (Official Statistics of Finland 2014b).

These numbers clearly show that native speakers of languages other than Finnish or Swedish already constitute a considerable part of Finnish society. In the future, they will play a bigger role in the demographics and culture of Finland. In the situations of increasingly growing pop-

ulation of foreign language speakers, it is essential to develop ways to aid in their successful integration to Finnish society. Successful integration means people move off from welfare into meaningful productivity. Services provided to families with small children may be considered as one of the means of supporting integration. Thus, the policy objective should be the children of new arrivals receive the highest quality day care services to facilitate their integration.

We conducted qualitative research in order to explore experiences and needs of new arrival parents in the field of Early Childhood Education and Care (ECEC), whose children attend a Finnish language day care. The specific topic of our interest is teaching Finnish as second language in a public day care in Espoo.

Both authors have personal experiences in dealing with language acquisition learning F2 either personally or supporting F2 learning and integration process of family members. Therefore, both authors have empathy with their subjects using service design methodologies for their topic. Poor language service offerings may significantly complicate integration, however, high quality ones may make adaptation to society smoother and swifter.

This scope of the research being conducted is for the purpose of learning the first hand experiences of new arrival parents on behalf of their children, end-users, learning F2 in the context of Kivenkolo Community Center. By conducting the research at the center, it provided a smaller place of study, an actual microcosm of Finland. This would assist the research by assessing end-users and their children's difficulties with F2 services and perhaps offer insights, revealing the bottlenecks that may be experienced at day cares throughout all of Finland.

Kivenkolo Community Center is a low threshold place open to the public. It maintains a cozy, home-like environment. This allows visitors to come and go as they please, to mingle with other visitors or to discuss with staff about various life challenges. Kivenkolo has two social workers. One works in the field of child welfare and the other deals with various social work cases. Kivenkolo attracts many new arrival parents along with their children and others. The center is a popular gathering place for mothers and their children for special social activities, including special programs geared for new arrivals. Therefore, this setting was perfect for our investigation of end-users of many different ethnic people groups.

The staff of Kivenkolo helped researchers by introducing to their guests—the new arrival parents and their children in a safe environment. Thus, the authors established contacts with respondents and allowed the researchers to win their trust. All collected data was to be treated with strict anonymity. Confidentiality is the cornerstone of building trust and generating reliable data without fear of retaliation. Six respondents were found at the center: five

mothers as end-users of F2 services and one F2 professional, a kindergarten teacher. The F2 kindergarten teacher furnished referrals for other two stakeholders, who teach or have the responsibility for F2 instruction elsewhere in Espoo.

Miettinen (2011) states resources and public sector funding are declining, while the push to find new service solutions is on the rise. By introducing and applying service design and user-centered design methods the service end-users, residents and the members of the community will be included to participate in creating new public services (Miettinen 2011, cited in Meroni & Sangiorgi 2011, 234).

Service design methods were selected and used for data collection and data analysis. First, this relied on directed storytelling and affinity diagrams both service design methods. The focus was to discover: what kind of F2 services exist especially for preschool children, whose mother tongues are different from Finnish? In other words, do the City of Espoo's F2 services meet the needs of new arrival parents and their children in their day cares? What are the bottlenecks and challenges of the current service provision for end-users, new arrival families and service providers, F2 professionals? Second, the study provides a platform giving each end-user a voice and empowering them potentially as a co-designer of the services provided.

The authors hope that our research may bring relevant ideas and perspectives to the planning of F2 services, especially for new arrival families. At the present, the Finnish population is rapidly aging. According to age structure studies, a shortage of native Finns in the work force is foreseen, thus encouraging additional immigration (Ministry of the Interior 2005, 2). Thus; the amount of the foreign work force imported to Finland is expected to grow through immigration in this scenario. To sum, a well pre-planned integration of new arrivals will be essential for strengthening Finnish society.

### 3 Theoretical framework

#### 3.1 Language and culture

Identity is a sum of the attributes which define who "we" are as a group. It draws a line between "us" and "them." Identity defines who a person is and to which groups they belong. Identity involves a continuous adjusting process. Foreign background children face a challenge of building their own identity when growing up in two cultures and languages that of their parents to join the mainstream society of the country. The aim of Finnish education system is to bring up foreign background children to be bilingual and bi-cultural. Ideally to have them become citizens' proud of their backgrounds, with sufficient language skills to successfully integrate into Finnish society. (Halme & Vataja 2011, 11-12).

People's identity may include different markers, such as specific appearance of group members, their customs, codes of behaviors, beliefs et cetera. However, the main marker of identity is language. (Crystal 2010, 384). Therefore, language plays the central role in child's development and learning. Language progress is closely connected with development of cognitive functions of the child such as their memory, intelligence, cognition et cetera. Language teaching is extremely important. It is both a tool for learning and subject of the learning process. (Nurmilaakso & Välimäki 2011, 31-42).

According to Normann, the language provides the basis for thoughts and feelings, being at the same time a tool for communication. Foreign languages have value only if they are based on the mother tongue. Foreign languages have no value, if they diminish the meaning of mother tongue or replace it. (Normann 1996, referred in Halme & Vataja 2011, 16). A positive attitude and respect towards child's identity must be maintained by their own parents and day care staff. This helps to bring up a bi-cultural and bilingual child (Halme & Vataja 2011, 11-12). This means the child has a strong sense of belonging to the parents' ethnic group and to Finnish society.

### 3.2 Mother tongue and culture support

Different perspectives exist whether children of new arrival parents should maintain their mother tongue in their new country of residence. One perspective emphasizes the importance of mother tongue as a means of cultivating a child's ethnic identity which provides a sense of psychological security and promotes development of language awareness. Another perspective sees danger in teaching too much mother tongue to children from ethnic minorities. The mother tongue may limit a child's perspective for their entire life and their interpersonal connections to Diasporas of the same language. Consequently, it may lower their chances for success in mainstream society especially if they fail to language of the land. (Crystal 2010, 378).

Nowadays, Finland has a positive view on mother tongues and cultures of other peoples, who do not belong to the native majority. According to the Act on the Promotion of Immigrant Integration, "in the integration plan organized for immigrants, not only Finnish or Swedish language learning goals are stated, but it is possible to agree on teaching of immigrants' mother tongues" (Finland 2010, 2, paragraph 11).

The spirit of Finnish Early Childhood Education and Care (ECEC) is based on the United Nations Convention on the Rights of the child and Finnish Constitution. Both documents stipulate the principle of non-discrimination on the basis of a person's origin, language or religion and right to maintain "own language and culture" (Finland 1999, 6, 17; United Nations 1989, 2, 8, 30). "One of the ECEC goals is support of mother tongue and culture" of all children re-

siding in Finland regardless of their linguistic and cultural background “in cooperation with representatives of the same culture” (Finland 1973, paragraph 1a).

Act on Basic Education (Finland 1998) defines “the scope of preparatory training organized for new arrivals and children of new arrivals before starting basic education. It also stipulates the option of taking “part of education in student’s mother tongue (even if it is not Finnish, Swedish, Sami, Roma or sign language) if that does not endanger child’s chances to succeed in the education” held in the mainstream society language. (Finland 1998, paragraphs 1, 10).

The right of children from ethnic minorities to their language and culture as well as secure learning and development is stipulated in the National Curriculum Guidelines on ECEC (STAKES 2004, 13). The Finnish positive attitude towards mother tongues of linguistic minorities has also scientific grounds. Children, who studied in their mother tongues, have better results in school, than children, who have not received mother tongue support. F2 instruction and mother tongue support provide a good basis for language cognition. (Nurmilaakso & Välimäki 2011, 87).

The process of building up of a child’s own identity happens through his or her mother tongue. Language is a powerful means, which is able to transfer cultural heritage and cultural identity to following generations. Mother tongue acts as a tool to preserve the culture by allowing the parent and child to interact with each other and the whole family to maintain cultural and personal contacts with their former home. Mother tongues operate as languages for thoughts and feelings, thus providing foundations for all learning. (Nurmilaakso & Välimäki 2011, 87-88).

Although, day care may help new arrivals to support their children’s mother tongues, new arrival parents have to keep the primary responsibility of their children’s upbringing and preserving of their mother tongue and culture. The close cooperation between new arrival parents and ECEC professionals (also referred as educational partnership) is needed in order to organize day care services that would not only teach children of new arrivals the Finnish language and culture, but also support development of children’s mother tongue and culture. Parents should be active in order to preserve mother tongue. (Halme & Vataja 2011, 9-15).

If parents do not understand the importance of mother tongue, ECEC professionals should tell them about its importance and instruct parents to use their mother tongue with their children (Halme & Vataja 2011, 15). Parents’ language behavior may depend on the international status of their mother tongues. If parents’ mother tongue is socially valued, family is more likely to maintain that particular language. On the contrary, if the language is not the official language in the country of parents’ emigration then parents are more likely to dismiss their lan-

guage. According to Teiss, for small children, their family and their close relations, attitudes towards bilingualism are more important than official status of the language (Teiss 2007, referred in Halme & Vataja 2011,17). That is why, it is important that both family and day care staff express a positive view on both the culture and the mother tongue of each child.

Day care support of mother tongue may be organized by hiring native speakers of foreign background children's mother tongues. Starting in the day care, the child may feel safer, if there are same language speakers around him or her. Also, Finnish speaking children develop linguistic awareness listening to foreign languages. If possible, foreign background children should have the possibility to play both in the Finnish language and the mother tongue at day care. If there is no such possibility, parents must assume greater responsibility for their child's mother tongue support. (Halme & Vataja 2011,18).

### 3.3 Finnish as a second language instruction, F2 and bilingualism

In Finland, the term “second language” or more concretely “Finnish as a second language” (F2) is widely used in the system of school education and day care. Finnish as a second language instruction is meant for “those foreign background children, whose Finnish language skills are not at the level of Finnish native speakers.” Furthermore, only children's “Finnish language skills should serve as a criterion” for this instruction and not their country of origin, length of residence in Finland or mother tongue (Finnish National Board of Education, 2008, 4).

According to the information given on the website of the City of Espoo (2012), “Suomi toisena kielenä -opetus” (F2 instruction) children from bilingual families having Finnish language as their official mother tongue, may also study Finnish as a second language. This is the case, if their Finnish language skills are weaker than should be. (City of Espoo 2012). The Finnish National Board of Education stresses that F2 teaching is not a form of special education. F2 instruction is aimed to develop children's knowledge of Finnish culture and Finnish language. (Finnish National Board of Education, 2008, 4). Finland aims to integrate NAP and CNA to the Finnish society, and not to assimilate them.

In Finland, as well in many other European countries one's proficiency in a foreign or a second language is defined according to the Common European Framework of Reference for Languages (CEFR). It contains three main levels: A (“Basic User”), a beginner; B (“Independent User”), a person who has average knowledge of a language; and C (“Proficient User”), a person attained high level of fluency. The highest level in that framework is C2 level which refers to a person who has almost native speaker proficiency in a foreign language (Council of Europe 2014, 33-34; Crystal 2010, 290-291). The usage of this system is proven useful since it allows measuring the progress of each student, in each moment of time. In the system of ECEC in the City of Espoo an adapted version of CEFR or so called Pienten kielireppu is used

for assessing children's level of Finnish as a second language. (Nurmilaakso & Välimäki 2011, 99-100; City of Espoo 2014b).

Usually, four competencies are considered when learning second or foreign language: reading, writing, speaking and listening. In the “palm model” vocabulary and grammar constructions are included to the competencies. In practice, this model is well suited for the evaluation of children's F2 skills and F2 instruction. (Halme & Vataja 2011, 21). In order to support harmonized F2 children's acquisition development, attention should be paid to each of the competencies.

Children's F2 learning is influenced by the period of residence in Finland and age of children's immigration into the country. It is assumed that correct grammar structures and native-like Finnish pronunciation is to be learned before the age of six. Furthermore, authors Halme and Vataja assert that after six years old, the child is less likely to reach the level of Finnish native speaker. (Halme & Vataja 2011, 22).

Therefore, it is essential for foreign background children to start learning Finnish language already in day care. Having spent several years in a Finnish language environment, foreign background children may have fewer problems with starting their school education (Nurmilaakso & Välimäki 2011, 100). According to the document prepared by Department of development of work with immigrants in ECEC (in Finnish: *Varhaiskasvatuksen maahanmuuttajatyön kehittämisjaosto*), foreign background children should “start attending at least part-time day care no later than being three years of age” (Ministry of Social Affairs and Health. 2007, 27).

There are two bilingualism types: simultaneous and consecutive. If children are involved in a bilingual environment before the age of three, learning two languages at the same time, it is defined as simultaneous bilingualism. Exposure to the second language later approximately after the age of three to four years, after the basics of the child's mother tongue are already in place, is defined as consecutive bilingualism. (Hassinen 2005, referred in Halme & Vataja 2011, 14).

Functional bilingualism is based on language functionality, which is a quite new concept in Finnish ECEC and preschool education (Nurmilaakso & Välimäki 2011, 93). Functional bilingualism means that a child's skills in two languages are developed enough to serve their language needs and purposes. The ideal “native-like control of two or more languages” (Bloomfield, cited in Baker 2011, 7-8) is not the educational goal of Finnish ECEC. Therefore, the skills in two languages are likely to be on different levels. The child should become able to use both languages actively, think in two languages and automatically switch between them



as needed. The child's mother tongue and second language are supposed to co-exist side by side and the second language should not replace his or her mother tongue (Hassinen 2005, cited in Nurmilaakso & Välimäki 2011, 92).

Starting day care and being exposed to the second language before the age of three has its advantages and disadvantages for children of new arrivals. According to Cummins, there is a critical period between the age of one and two years old, when the change of language environment may bring negative consequences to the child's language development. That age is very favorable for language development, but at the same time there is a danger of mother tongue replacement by F2. In order to avoid language development difficulties, a child should get equally rich oral input in both languages. Therefore, close cooperation between parents and day care staff is needed. However, a child approximately age four years old, has already built basics of their mother tongue, thus the language environment change is smoother. (Halme & Vataja 2011, 14-15).

F2 instruction should be integrated into day care everyday routines and should not be considered a distinct part of ECEC. Though most of F2 instruction happens in routines, foreign background children need also regular F2 teaching on the level of actual children, in small groups or larger (children's) groups. Instruction methods are to be chosen, according to the children's cultural background, their interest, language skills and ages. (Halme & Vataja 2011, 24-26).

F2 instruction is based on functionality, play and child-centeredness. The best results may be reached in play situations, when children are eager to learn. (Halme & Vataja 2011, 24- 25). F2 teaching should precede children's language development and not follow it. Activities and instruction offered to children should be always targeted at so called "Zone of Proximal Development" (ZPD) that is the level a bit higher than their current ability. However, if child does not know F2, it is difficult to find out their real ZPD. (Vygotsky 1978, referred in Halme & Vataja 2011, 26).

Day care educators should provide foreign background children with a suitable F2 learning environment and rich oral language input. Background noise may bring challenges to F2 children, since they may hear words incorrectly; improperly learned words are difficult to relearn later. (Halme & Vataja 2011, 90). Quality and amount of communication are important for F2 development (Halme & Vataja 2011, 35). ECEC educators should pay attention to the quality of their Finnish language proficiency. Their language should be clear and logical. 'F2 moments,' being difficult for new arrival children, should be paid special attention to and praised (Halme & Vataja 2011, 26). Educators should be aware of different learning styles of children and their own F2 instructional habits. Learning styles are divided into auditory, visual and kinesthetic-tactile. Educators should apply different learning styles. Various methods and

communicative senses should be used to support children's F2 learning. (Halme & Vataja 2011, 38-40).

ECEC professionals should pay attention to foreign background children's F2 acquisitions and not to their F2 learning defects. They should not require a perfect knowledge of Finnish from a child. (Halme & Vataja 2011, 22). Even small initiatives and speech attempts of each child should be given special attention (Halme & Vataja 2011, 23).

Bilingual, as monolingual children may have language and developmental problems. Bilingualism is not known to cause any language problems. Identifying foreign background children's language difficulties is challenging and requires excellent knowledge. If ECEC professionals are concerned about a child's language development, then they should also discuss about child's mother tongue skills. (Halme & Vataja 2011, 40-43). This highlights where the difficulty appears in one language, or may be a sign of more structural language deficiencies.

### 3.4 Curriculum guidelines on ECEC and ethnic minorities

National Curriculum Guidelines on ECEC are aimed to provide a framework and general guidelines regulating the content and quality of ECEC activities in Finland. These guidelines on ECEC serve as a basis for 'local ECEC curricula' (Please see Appendix 1). Two educational goals of ECEC such as promotion of children's "personal well-being" and "reinforcement of considerate behavior and action towards others" are worthy of mention. Because the first principle focuses on respecting children's individuality, furthermore, the latter focuses on children's learning to think not only about themselves, but take other people into account and to feel compassion towards them. Through implementation of these principles ECEC targets to facilitate building a future for a more stable and equal society. (STAKES 2004, 14). Another important principle, referred in the guidelines mentioned above is ECEC partnership. More details are mentioned later in the text in the Chapter 2.5.

National Curriculum Guidelines on ECEC stress the importance of creation of favorable conditions for children's language development. It emphasizes speaking to children at their own level. Moreover, importance is placed on providing children with suitable conditions for playing, practicing 'physical activities, obtaining 'artistic experiences' and exploration are emphasized. (STAKES 2004, 18-23).

Finnish ECEC serves as a first means of integration of children from 'cultural minorities' into Finnish mainstream society. Children receive their ECEC within the mainstream educational system. Thus, they have the possibility to learn Finnish as a second language naturally from direct interaction with other people and F2 instruction in their day care. The ways and means of supporting a child's mother tongue and culture are discussed by educators with parents and

written down in the child's 'individual ECEC plan.' ECEC encourages children to speak their mother tongue; the cultural background of the child is also appreciated within ECEC. Parents play a key role in 'retaining and developing' their children's mother tongues and other cultural markers. (STAKES 2004, 33-35).

The final goal of the Finnish education system is to bring up children as members of a multicultural society. The hope is that they will identify themselves as a member of both the Finnish mainstream society and their own cultural groups. (STAKES 2004, 33). Such children are supposed to develop both multicultural identity and functional bilingualism (Finnish National Board of Education 2008, 4).

### 3.5 ECEC partnership

National Curriculum Guidelines on ECEC in Finland stress the importance of cooperation between parents of a child and educators also referred as 'ECEC partnership' (2004, 12). ECEC partnership is a close cooperation between educators and parents, built in order to support children's overall development, fulfill their needs and 'best interests.' Partnership requires reciprocal respect, trust and equality between both parties. The decision about a child's need for additional support is made on the basis of both educators' and parents' observations. Parents also should have an opportunity to influence the ECEC curriculum of their day care and 'participate in its evaluation.' (STAKES 2004, 28-31).

Educational partnership plays an important role in Finnish ECEC. The starting point of educational partnership is child's needs. Therefore, the activities of ECEC plan guide the implementation of child's rights and best interests (City of Espoo 2013, 38). Educational partnership may be more important for foreign background children, because they may need more help. The support comes from the ECEC educators and the child's parents in order to learn how to combine two languages and two cultures. Educational partnership is essential for successful language development for a child. Only partnership between parents and educators can provide the day-care center staff with sufficient knowledge about development stage of the child's mother tongue. This is deemed important for the development of the child's Finnish language skills. (Nurmilaakso & Välimäki 2011, 89). Educators should talk to parents about importance of mother tongue and encourage them to talk in their mother tongue to their child (Nurmilaakso & Välimäki 2011, 96).

Our thesis lies within the frameworks of core values posted by the City of Espoo with regard to Finnish language ECEC. Espoo emphasizes innovativeness or pioneering nature of the municipality's activities and resident-centeredness. Espoo ECEC Guidelines stress the importance of active participation of the municipality residents to develop its services and the spirit to attempt to conduct things in a new way. (City of Espoo 2013, 11).

### 3.6 Multicultural Espoo

This study focuses on children learning F2 organized and provided by the City of Espoo within ECEC system. According to Espoo's vision, Espoo is a 'pluralistic and multi-cultural city that is "a great place to live, learn, work and do business." The objective of the City of Espoo multiculturalism program 2014-2017 is to "strengthen children and young people's Finnish language skills in ECEC and basic education." Good command of domestic national languages: Finnish or Swedish is necessary for successful integration. Fluency paves the way for better opportunities for future education. Social exclusion is prevented by people holding good paying jobs. A young people who lacks fluency in Finnish or Swedish speaking their mother language has five times higher risk of social exclusion than a native Finn. (City of Espoo 2014a, 1, 5, 8).

City of Espoo seeks to develop its services in a way that the key evaluation criteria for organizing services are the quality of services and economic affordability. In particular, the immigrants' own organizations can reach out vulnerable integration groups such as migrant families or housewives. Immigrant organizations can provide information on Finnish society, thus contributing to the integration of their fellow citizens. (City of Espoo 2009, 6).

Espoo multicultural program 2009 states, "the biggest challenge for public services is to take care of the readiness of basic services to provide high quality services to all city residents while immigrant population is continuously growing" (City of Espoo 2009, 8). During the period from 2001 to 2011, the share of speakers of other languages of the metropolitan area population grew by 67 percent. Equal to the trend of the growth in the numbers of immigrants is an increase in the heterogeneity of the immigrant population. In 2011, there were 160 different mother tongues and 150 different nationalities registered in the metropolitan area. (Forsander 2012, 2, 4).

In 2005, slightly more than 60 percent of foreign speaking children originated from the families which belonged to the two lowest income deciles. Many of the major integration challenges are related to the second-generation immigrant populations in the Western European countries. The well-being of a migrant urban population is closely linked to the improvement of their socio-economic status. In terms of their wellbeing, the most central issues are employment and training. Inheritance of social deprivation of CNA can lead to creation of ethnic hierarchy and tensions between city residents and therefore jeopardize harmonious development. (City of Espoo 2009, 8-9).

### 3.7 ECEC Curriculum of the City of Espoo and F2

Language situation in Espoo is diverse. ECEC Curriculum of the City of Espoo (see Appendix 1) places a strong emphasis on importance and value of a child's mother tongue regardless whether it is Finnish or any other language as one would expect from any municipality. Edu-

cators should plan and implement language upbringing in such a manner that it would promote the smoothest language development of all children, both Finnish native speakers and those who learn Finnish as a second language. Mother tongue of foreign background children should be developed as it acts as a basis for the second language learning. Parents are encouraged to speak to their children in their mother tongue. Additionally, foreign background day care workers being native speakers of certain languages can help children preserve, maintain or develop their mother tongue skills. Language skills of all children are evaluated by educators and parents in cooperation. Language learning progress of children speaking F2 is regularly assessed, using the tool, Pienten kielireppu, mentioned earlier. (City of Espoo 2013, 26-27).

In a day care setting, children's backgrounds are taken into account. Familiar things are used often, for example to celebrate cultural festivals belonging to their culture traditions other than Finnish culture. To help children understand F2, not only spoken language is used, but F2 learning is also supported by using pictures, auxiliary gestures, signs and facial expressions. Visual aids make communication easier with foreign background parents and their children. (City of Espoo 2013, 46).

However, sometimes visual aids are not enough for building mutual understanding between parents and staff of day cares. According to the ECEC Curriculum of the City of Espoo, "from the perspective of building up an educational partnership, when necessary using an interpreter contacting multicultural families in order parents and unit staff to understand each other as well as possible" (City of Espoo 2013, 39). In practice, implementing multicultural early childhood education requires a healthy and mutual cultural understanding. Open dialogue must exist between day care staff and parents, about parent's goals and their child's needs. (City of Espoo 2013, 45).

F2 guidance is needed in order to reach mastery in F2 learning. This aids the natural learning process (City of Espoo 2013, 45). Therefore, a bilingualism plan (in Finnish: *kaksikielisyyden suunnitelma*) is created for every child from ethnic minority as a part of the child's own ECEC plan. It contains a program of support of the child's mother tongue and teaching of F2. Educators must implement a preplanned, goal-directed F2 instruction to children from minorities. Progress must be regularly monitored in their F2 learning by using Pienten kielireppu. (City of Espoo 2013, 46).

## 4 Services

### 4.1 Services and public sector

Today, we are experiencing a rapid multiplication of services. The turn of the century has seen the emergence of an economy, based on “networks, sustainability and services.” (Meroni & Sangiorgi 2011, 1). Services account for approximately 70 percent of the Gross domestic product, including employment in western economies and others. (Scheler 2013, 1). F2 instruction is viewed as an important public service essential to integration in our study.

Services are processes where certain actions are taken to solve the customer's problem and to find a solution to their need. Solutions are an outcome of service that produce value to the customer. (Miettinen 2011, 43). Services are interactions and co-operation between people producing recognized value. (Meroni & Sangiorgi 2011, 1; Miettinen & Koivisto 2009, 45). What is the value of F2 instruction? F2 instruction is the ability to communicate, in this case for the children of new arrivals. Not only for their survival, but their ongoing academic success. The value received is fluency, thus citizenship is more meaningful.

Koivisto (2014) claims that service is a structured system. It is generated as a result of a number of actors and stakeholders, operations and interactions. The productivity of service delivery and customer experience can be improved, when a variety of value creation networks, including tangible and intangible bottlenecks affecting them are understood and tackled. (Koivisto 2014, 41). Oxford Dictionary defines a bottleneck as “a situation that causes delays in a process or system.” (Oxford Dictionary 2015). The weakest points in the service delivery can cause the customer experience to turn into a negative one. In this context, the City of Espoo creates, maintains and manages the structured system of F2 instruction services and invariably there are service bottlenecks. By finding bottlenecks to F2 learning both the delivery and efficacy of F2 instruction can be improved.

Services are heterogeneous and intangible, making them more difficult to standardize as compared with goods. Services are dependent on human assessment and interactions. Provision and consumption of services are inseparable. Both consumers and producers “co-create value” in the service experience. (Meroni & Sangiorgi 2011, 89). In F2 services CNA are the ‘consumers.’ F2 teachers are the ‘providers.’ F2 learning is a moment by moment experience for both consumers and providers. Learning successes in F2 need to be praised. This reinforces language learning for each child. Additionally, praising builds motivation for the teacher.

Services take their final form at the moment of experiencing them by customers. Customers use the services produced by organizations providing them. In this process both are involved in the shaping of services. Furthermore, Tuulaniemi states that the best and most meaningful

services meet people's real needs and can be produced with little energy and cost-effectively. (Tuulaniemi 2011, 20, 118). F2 language learning is a 'process.' It is produced not only in a classroom, playground but also even during potty time. However, at times F2 instruction takes tremendous energy and patience by both CNA and F2 professionals.

The definition of service in a service user study, includes the study of user information. Hyysalo defines user information as "information that can be used to create a useful, usable, desirable and appealing product or service for actual service users." Moreover, user information can be utilized to create a product or service that "meets the users' expectations and needs; helps users to achieve their objectives;" and "leads to the desired outcomes such as joy and pleasure." (Hyysalo 2009, 18 - 20). Service design techniques may produce an abundance of data. However, an effective analysis of user information should provide useful user information for improving F2 instruction (discussed in Chapter 6). Children of new arrivals' F2 fluency makes life more pleasurable and easier to navigate for them.

Furthermore, Hyysalo (2009) states ... "the biggest benefit of user information is that it provides market and customer information about how and why users behave" in service provision and consumption. Thus, it deals with their wants and their needs. User information helps researchers discern important information about users' values. What they like about a product or service and including its operating environment. This user information explains what is the most important while using the product or service. (Hyysalo 2009, 18-20). The definition of user information is helpful for our F2 study. For example, storytelling is used with parents of new arrivals to obtain user information. In the end, it gives a voice end-users for the sake of children of new arrivals. Later, we discuss their values and appreciations of F2 services.

Governments or sub-governmental bodies design public services— by their principles, practices and methods. Recently, the role of services promotes and contributes to human environment, trust, social inclusion, coherence and justice in a society, are now widely acknowledged. Junginger (2013) claims that services abide as tools for the implementation of policies. They do not work well or do not necessarily reach citizens when too cumbersome instead of making life easier for end-users. (Junginger cited in Miettinen & Valtonen 2013, 19). Our study reveals many complications in the public service of F2 instruction. Of course, social inclusion is enhanced by F2 language instruction that allows people to fully participate in a society as productive citizens.

The public sector is an important economic player in regulating, providing services and employing people. Public sector jobs account for more than 25 percent of all jobs. The public sector is a key player to develop standards to ensure financial stability, as well as actions to boost "growth, competitiveness and employment." (EPSIS 2013, 6). Our study reveals whether

or not, current F2 levels of employment are satisfactory from users and providers perspectives.

#### 4.2 Customer or service user experience

Even some public services are free of charge, it is important to understand the concept of customer experience. Understanding service user's and customer's experiences are essential, in order to find bottlenecks of service. According to Tuulaniemi, customer experience consists of every aspect of a service provider's offering, such as solutions offered to meet needs and problems such as goods, services, information, advertising and other service touchpoints. Furthermore, it comprises quality of customer service, service features, ease of use and reliability, as well as combinations therein. (Tuulaniemi 2011, 40, 74). The above-mentioned topic is taken from the classical sense of a service or product. However, it highlights bottlenecks of service. This supports the efficacy of service design techniques in the examination of public services for both end-users and service providers, in our study in F2 instruction.

The highest level of relevance to customer experience includes "images and meanings... cultural codes, dreams, stories, promises, insights from personal experiences both the relationship between the customer's way of life and their own identity." The service concept enables customer or service users to achieve the varying aspects stated above. (Tuulaniemi 2012, 74-75). In terms of F2 instruction, fluency is the name of the game for the realization of hopes and dreams.

Grönroos argues that encounters between the customer or service user and the service provider, are so-called 'moments of truth.' These encounters comprise the customer experience (Grönroos 2009, 100). Customer experience consists of comprehensive interactive experiences. The customer connects to the service provider's operations in a number of different areas and ways, called service touchpoints. The customer's feelings and subconscious interpretations impact on their customer experience. The service provider cannot fully control what kind of customer experiences will be formed. (Löytänä & Korteso 2011, 11-15). Storytelling as a research method provides opportunities for 'moments of truth.' These are deep-seated emotions and feelings, providing invaluable clues on how to improve service provision F2 services.

For instance this is highlighted by Komppula and Boxberg. They claim that customer experiences as defined above includes information received from other customers, their acquaintances and relatives will influence on the customer's personal impressions whether 'positive or negative.' (Komppula & Boxberg 2002, 45-46). In our research, customer experiences are collected from parents on behalf of their children.



Management plays an important role in providing quality services. Good quality requires that management is aware of what the customer considers as a good service, and what the customer values in that service. In essence, success relies on that customer expectations converted into clear plans and the definitions of quality. Additionally service quality can be continually developed and upgraded. (Komppula & Boxberg 2002, 59-61). The City of Espoo is responsible for the management of the F2 instruction (see government guidelines as mentioned earlier).

#### 4.3 Design thinking and service design methods

Design thinking approaches and solves difficult problems from the end user point of view. It uses a wide array of methods and tools, which everyone can put into practice from a corporate executive to a school child. Language of design has been adapted to other fields such health care and public services which should be more user-centered. Design thinking applies empathy in context. It is an approach to design services, spaces, experiences and strategies (Curedale 2013, 28-29). Originally, Brown introduced design thinking utilizing the “designer’s sensitivity, techniques and methods of discovery” to understand peoples’ needs so they can be satisfied (Brown 2008, 86-89). Our task is to introduce design thinking into F2 service.

According to Allio, design thinking introduces a fresh paradigm shift to traditional decision-making process. Instead of focusing on formulating policies from the tops-down view in an organization, it focuses on end-users needs (see Figure 1). Applying design thinking approach engages the end-users as active participants in shaping decisions. It utilizes professional empathy and co-creation in this process. The approach takes into account reasons and root causes for problems looking at the issues to be solved from the holistic viewpoint. It helps to promote better and effective “decision-making, reduced risks of duplications; inconsistencies or overlaps and minimized unintended consequences.” (Allio 2014, 4, 6). These issues and bottlenecks to be solved are discussed in Chapter 8.

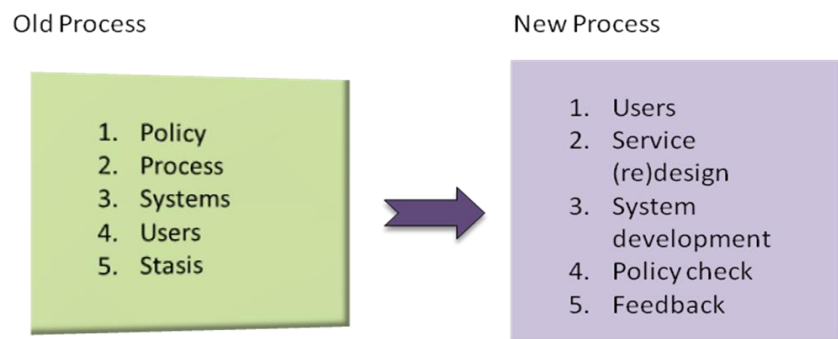


Figure 1. Illustrates the paradigm shift from the old to the new decision-making and its components (Allio 2014, 7).

The use of design thinking and design methods for developing services may develop into a ‘change agent’ or catalyst, capable of acting in the new social networks. It enables creation of novel and new visions, strategies and solutions. In fact, according to Meroni & Sangiorgi, (2011, 12-14) design thinking can be applied to any area of ‘human experience,’ including F2 services.

Since this study is exploring user experiences of early childhood education F2 teaching services, service design methods and tools are used. Service design applies inter-disciplinary, holistic and integrative approach in designing services (Moritz 2005, 4). Service design integrates service end-users as active partners: ‘co-creators’ and ‘co-designers’ at any time during the design process, both involves stakeholders and internal or external experts from many professions and fields. (Miettinen & Koivisto 2009, 36-37). In our study, F2 teachers and other professionals are stakeholders. Furthermore, an external service design expert is interviewed.

Service design utilizes—direct observations, “generative, evaluative and predicative research methods”—thus to concretize new innovations or service offerings. Within these methods, new customer and end-user needs and/or ways to improve the existing service may be discovered. Generative methods generate and uncover deep insights, ideas, and opportunities from service users’ point of view. The evaluative method commits the participants in the design, using creativity and critical thinking, sketching, models, videos, prototyping, and continuous learning through processes of determining for example what, how, to whom the service offering is being provided. Predicative methods investigate future opportunities and ideas, speculative scenarios by assessing the extent of the opportunity and probability, while most of the variables remain unknown. (Miettinen & Koivisto, 2009, 50, 62-63). Our study uses the generative method to gather insights, ideas and opportunities from new arrival parents’ point of view regarding F2 teaching.

Service design and its processes tend to focus on delivery of benefits experienced by the customer or end-user by studying their feelings, human experiences, expectations and needs. Therefore, its objective is to collect wide-ranging ‘customer insights.’ (Vähälä, Kontio, Kouri & Leinonen 2012, 20). The service experience may arise before the customer is connected to their service provider or even when contact to the service provider no longer exists (Miettinen & Koivisto 2009, 36). We focus only the existing end-users in F2 instruction, except for one end-user who discussed about their child’s past experiences.

Service design provides techniques involving all stakeholders to “work together and create solutions in a way that is understandable and accessible for everyone,” which result to the generation of a ‘consensus.’ As a matter of fact, a new or updated service offering often requires a change process. Engaging employees and other stakeholders inside an organization in

this process is an important phase when generating consensus. It is important to make room for “participation, creation and failure.” (Chin 2014, 5) Applying service design is a mutual learning process between stakeholders and end-users. In this study, we depict consensus from end-users, the parents and, the stakeholders and service providers, the F2 ECEC professionals regarding solutions to bottlenecks.

#### 4.4 Service design tools: service touchpoints, the customer experience mapping

One of the objectives of service design methods is to create an invisible and intangible service into visible, for instance, through mapping out service touchpoints and customer journeys. The customer journey map helps to identify how the customer is treated during each touchpoint and how the customer feels towards the organization at the end of the experience along the time line. (Miettinen & Koivisto 2009, 15).

Customer experience map describes all the main steps and experiences as well as emotional highs and lows a customer goes through “as they use a product or service” in order to attain a goal and fulfill a need. Customer experience map documents and visualizes experiences and activities from a customer’s point of view. Customer experience mapping provides information to evaluate and “analyze interacting factors” which shape a customer experience. (Curedale 2013, 119). See Chapter 6.3. for a diagram on customer experience mapping and its results.

Customer experience map consist of service touchpoints. These are elements of service, which an individual evaluating a service is able interact with, see, smell, touch and /or taste. (Parker & Heapy 2006, 105). Service touchpoints are also tangible, such as spaces, objects, people, or interactions through which the service is experienced. For example they comprise different advertisements, a web site, mobile phone and computer accesses, invoices, as well as sales and customer service. All touchpoints should be clear, consistent and uniform entities. (Moritz 2005, 105). Stickdorn and Schneider claim (2011, 138) that service design is about selecting the most pertinent touchpoints for delivering the services, both designing a coherent customer experience over these service touchpoints.

#### 4.5 Public sector and innovation

The ever-growing complexity of societal problems means that the public service sector is threatened with cuts. These challenges have made the government and institutions to take a serious look on public service innovation. As a result, what are needed are new and innovative service solutions and approaches to a wide array of public sector services. In our investigation of F2 services, there is a clear need for innovative solutions to achieve more with less expenditures of taxpayer’s money.

Meroni and Sangrioni claim that societies are facing increasing challenges such as ageing of the population, the resurgence of long-term deteriorating health conditions, immigration and racism, pollution of environment, global warming and economic recession. These challenges have made the government and institutions demand action. (Meroni & Sangiorgi 2011, 119). According to European Public Sector Innovation Scoreboard (EPSIS), public sector innovation is defined as a “new or significantly improved service, communication method, process or organizational method.” (EPSIS 2013, 9). Service design techniques may play a vital role in providing solutions to these challenges.

Most of the governments of European countries recognize the importance of innovation in the public sector as the means by which it is possible to both overcome the current cost-cutting measures and to help to meet the challenges of globalization and the major societal challenges in the long term. However, it is a phenomenon that is rather under-explored and may-be even more poorly written down. (EPSIS 2013, 6).

According to European Commission, service innovations are increasingly regarded as an enabler of a society driven innovation with policies at national and regional level that are using service innovation to address societal challenges and as a catalyst of societal and economic change. TEKES places service innovation as strategic medium in bringing about changes in the areas of “health and well-being, clean energy, the built environment and information society.” (European Commission referred in Meroni & Sangiorgi 2011, 14).

Lately, public organizations are increasingly interested in service design which is regarded to support innovation strategies in public sector. Present economic crisis, changes in the family structure, digitalization of services both broad social changes in the public sector are creating a demand for a new approach which would take into account also the weakest portion of the population. (Miettinen & Valtonen 2013, 138).

According to OECD, collaborating and partnering with users and citizens has currently emerged as an important means and paradigm of innovation of public services. It contributes to some of the trends already in progress in the OECD countries, such as focus to customers and personalization of services. This way of thinking takes the view that public services work better when planned and implemented in partnership with citizens in order to take advantage their interests, energies, knowledge and objectives. (OECD 2011, 16 - 17).

According to the findings and European Commission pilot study of the public sector, Europeans are innovating. Especially, the public administration is a very innovative: two thirds of public sector organizations have adopted the “at least one service innovation.” However, public sector is still encountering several obstacles affecting also on its effectiveness at large.

These obstacles identified can be “lack of support and incentives for staff from management,” resistance from personnel or culture reluctant to take risks, “lack of human or financial resources and regulatory requirements.” Participation of managers and employees helps the innovations in the public sector in turn ideas from staff, management and clients are the major information sources while developing innovations. (EPSIS 2013, 5).

Corporate culture contributes a lot on the delivery of the service quality. Service design observes the existing corporate culture and supports the required change as part of the design process. Service design examines and takes into account the service environment involving employees, customers and development, evaluation both empowerment of people. (Miettinen & Koivisto 2009, 36-37).

Iteration characterizes service design which means a repeated design process. While employing iteration, design solutions are refined; multiple solutions for the development are processed and experimenting where both results are evaluated and tested. (Miettinen 2011, 23-24). A variety of techniques are applied, including a variety of visual arts techniques and methods, forms, models, prototypes, storyboards in order to investigate, illustrate and document customer’s experiences and interactions. (Miettinen & Koivisto 2009, 38).

#### 4.6 Co-design in the public sector

Co-design is based on the idea that everybody will be able to participate in decision-making of services when such services affects him or her. Co-design and user participation is essential for iterative review of the problems and the alternatives by the means of conversation, visualization and collaboration with stakeholders. Public services affect everyone’s lives directly, when one uses them and indirectly through the well-being of the community and society. (Vaajakallio & Mattelmäki cited in Keinonen, Vaajakallio & Honkonen. 2013, 59).

The current Local Government Act (In Finnish: *Kuntalaki*) states that “local residents have the opportunity to participate in decision-making services for the planning, preparation, decision-making and in the implementation phases.” In 2008, National innovation strategy objectives were approved to secure the municipal residents the opportunity to develop their services as their user. ‘User orientation’ is one of the key concepts of national innovation strategy. User-driven approach is a new trend and field of study, both in an international as in a national innovation policy development. Many municipalities have adopted a user-driven approach in their municipality strategy. In the capital region, the City of Espoo and Helsinki have implemented these new strategies. (Jäppinen & Sallinen 2012, 8).

Co-production enables individual users and civil society groups to participate directly in the planning and implementation of the public services. The term includes specific notions such

as “co-design, co-creation, co-delivery, co-management, co-decide, co-evaluate, co-review” projecting variety of citizen involvement and contribution in common matters. (OECD 2011, 17).

According to OECD, governments and administrations co-produce with citizens when they ‘partner with’ them or utilize volunteer groups to oversee for example the physical conditions of public infrastructures and services both distribute information which citizens can use to generate improved or new services. Thus, co-production enables the service user to take more control and ownership changing the relationship between the service user and provider. In addition, co-production may result in improvements such as cost-cutting in service production, add satisfaction by providing more individual services or greater choice and control both creating a readiness to confront complicated social problems. (OECD 2011, 17-18). OECD member states have generated practices to enable citizens and service users to be involved in developing of public services, varying from simple feedback about the quality of service to more influential consultation in decision-making (OECD 2011, 17-18).

#### 4.7 Challenges of design thinking approach in public sector

Although public sector is primarily based on organizing services, it is quite new to the concept that services could be better organized. However, according to Nicola Morelli, there are several differences compared to mainstream commercial mindset, such as public sector services are “missing a focus on user centered approach instead they focus on saving resources.” However, the resource savings may end up penalizing the actual service end user. (Miettinen & Valtonen 2013, 138).

Local municipal authorities have an important role in operating and producing services for their residents - they have a statutory responsibility and obligation to produce certain basic services. Tuulaniemi states that one of the core responsibilities of the municipality is optimization of the welfare of its residents by providing services. However, according to Tuulaniemi, the political decision-making system is a major challenge for reforming municipal services, in particular, if some or the majority of the groups are committed to maintaining old structures in decision making. In multi-stage decision-making system municipality services are considered to be cut down significantly. Furthermore, the public sector does not possess adequate structures in order to utilize wider design thinking. In addition, the public field also lacks experience in buying service design expertise. (Tuulaniemi 2011, 279-284).

According to Kurronen’s study (2013), the services offered by the City of Espoo educational department are seen as “mechanical and administrative,” despite “it seemingly serves the interests of the client.” Therefore, adopting a user-centered perspective to develop services is challenging. Moreover, clients are seen as apart from services, and even as “complicating

the operations.” In particular, the administration people regard their organizational operations as “technical by nature.” The organizational, hierarchical tops-down approach makes it challenging to conduct collaborative work. “Leaders are used to manage and field workers to receive the inputs coming from the top.” (Kurronen 2013, 56). Besides, “maintaining the administration eats up the time and resources.” “Silo-like structures” in public sector hinders communication organizationally. Lastly, design projects are “loose and short term.” (Kurronen 2013, 76).

In Finland, however, the public sector is only taking the first steps in the use of design. The following challenges have been observed regarding the use of design in the public sector. First, “design is not recognized at the strategic level, even if it could be used to substantially develop the public administration and to create practical solutions.” Secondly, “design projects are often small-scale and as separate from the organization's operations.” Lastly, “solutions will not often reach the whole organization; in this case the effectiveness remains modest.” (Ministry of Employment and the Economy et al. 2013, 82).

## 5 Study design

This study is a small-scale evaluation research of the F2 services available to new arrival parents in the system of ECEC of the City of Espoo. Moreover, this study investigates the effectiveness of applying service design techniques to collect data. Evaluative research gathers data or proof whether a program, process or technique is worthwhile and has value. “When one examines and judges accomplishments and effectiveness, one is engaged in evaluation.” ‘One is involved in evaluation of research data collection and analysis is systematic and empirical.’ (Merriam 2014, 4).

Since this study is an evaluation research, a natural decision has been made to implement this study according to the core principles of evaluation. According to the “Standards for Program Evaluation, created by Joint Committee on Standards for Educational Evaluation” (1994, referred in Patton, 550), evaluation should imply four main features: “accuracy, feasibility, propriety and utility.” Evaluation should be made only if it may be “useful to some audience.” It could be implemented only if it is “feasible to conduct it in political terms, or practicality terms, or cost effectiveness terms.” Evaluation should be done ethically and fairly. Lastly, only if these points are implemented, one can pay attention to “the technical adequacy of the evaluation.” (Stufflebeam 1980, referred in Patton 2002, 550). The “concept of utility” may concern also the “time dimension.” As a rule, researchers, unlike ethnographic fieldworkers, have quite limited amount of time to implement evaluation. “To be useful, evaluation findings must be timely.” (Patton 2002, 274).

In this study, all four core principles set for evaluation research were met. Our research concerns a highly timely topic of F2 teaching providing to children of new arrivals within ECEC system, thus it might be interesting and potentially useful for decisions-makers of City of Espoo and ECEC professionals. The data was collected in the fall of 2014; therefore the interested parties obtain fresh data. This evaluation research was feasible to conduct in the above cited terms. The authors made every attempt to implement this study as ethically and accurately as was possible in a given context.

There are two most well known types of evaluation research: ‘summative and formative evaluations.’ Summative evaluation is involved when there is a need to make a conclusion on “overall effectiveness” of a program, organization, policy, product...et cetera and a decision should be made about whether to continue the program et cetera being examined. On the contrary “formative evaluations aim at forming (shaping) the thing being studied.” Formative evaluation aims to improve the effectiveness of an actual policy, program, product or staff group. (Patton 2002, 218-220).

In fact, this study is formative evaluation of F2 service within ECEC of Espoo available to children of new arrivals. The focus of the formative evaluation is both on weaknesses and strengths of the project under study. Desired results of that type of research would be recommendations for the program improvements. The main requirement for this kind of research is its “usefulness to and actual use by intended users in the setting studied.” (Patton 2002, 224).

The purpose of formative evaluation is practical. This kind of research is usually implemented using qualitative methods. Formative evaluation findings are “context specific” and are not aimed to be generalized “beyond the settings in which the evaluation takes place.” (Patton 2002, 220-221, 435). Unlike academic research, formative evaluation, due its primarily practical function, often does not require a written report on findings. Quite often findings are reported to the interested parties either orally or in a form of “an executive summary.” Writing of a full formal report often is not cost efficient. However, sometimes decision-makers may request a “formal written formative report” and then “the nature of formative reporting, is dictated by user needs rather than scholarly norms.” (Patton 2002, 435-436).

### 5.1 Respondents selection criteria

The authors intended to obtain a comprehensive picture of the respondents’ experiences and ideas for future development for F2 services in ECEC system of Espoo. Three groups of respondents were engaged in this study: five new arrival parents, three ECEC professionals and one service design expert.



First group of respondents was comprised of five new arrival parents (end-users on behalf of their children) that attend or have recently attended Finnish language day cares in the City of Espoo. Respondents were selected for our study was all individuals born abroad and immigrated to Finland as adults. All parents chosen for our research were “circumstantial bilinguals;” it means that they had to learn a second language (Finnish) in addition to their mother tongue in order to operate successfully in the Finnish society, when they had moved to Finland (Baker 2011, 4). The basis of selection of respondents was that none of parents would be a native born Finnish language speaker or Swedish speaking Finn. This ensured that their children had no systematical exposure to Finnish language before starting day care. The last requirement was that respondents' children would not be older than 8 years old at the moment of the interview, so that parents would remember very well their experiences and feelings concerning their children's experiences gotten in Finnish language day care of Espoo.

New arrival parents and their children represent the group of customers, using F2 teaching services of Espoo. They were asked to share their experiences, needs, hopes and dreams to furnish their ideas for future development of F2 teaching.

The second group of respondents constituted ECEC professionals closely working with F2 in Espoo. F2 service providers are stakeholders and provided us with views and ideas differing from clients' point of view. By Interviewing three F2 professionals we wanted to explore the situation of F2 in day cares from their point of view and listen to their experiences, needs, challenges and developmental ideas for F2 teaching.

A service design expert represented a third group of respondents. He was selected because of his service design expertise in the public field. Service design aims to create and develop services that better serve the needs and wishes of clients and actual service users. By interviewing a service design expert we aimed to find out what were the realities and possibilities for applying service design methods in the public sector, in particular concerning the delivery of F2 services in the City of Espoo.

In addition, important criterion for respondents was that they must speak Finnish, English or Russian languages, since authors did not have any additional funding to use translator services for communication with respondents. Respondent interviews could only be conducted in Russian, Finnish or English. All interviews of NAP were conducted in Finnish language, unless English or Russian was the modes of communication. Moreover, F2 professionals responded only in Finnish. The service design expert was interviewed in English.

## 5.2 Sampling methods

Mixed sampling methods were used in this research. Typical case sampling is used to illustrate what is a typical case within a given setting. Key informants (program staff or well informed participants) cooperate with researchers, helping them select typical cases, because they have the expertise to define what is typical for a specific context. However, it is important to keep in mind what kind of sampling method is able to illustrate on the example of one or more typical cases. Furthermore, what is typical in a given setting to people not being familiar with the context? Unfortunately, this sampling method can provide only some qualitative profiles, but is not able to provide researchers with generalized assertions about experiences, which all participants have had in a specific context. (Patton 2002, 236-244).

Key informants sampling approach employs questionnaires or interviews in order to get an expert opinion from persons who are assumed to particularly know about issues and needs of the target group (or population), as well as present gaps in provision of services to the population. Key informants may include group leaders, practitioners or an organization which work or are closely linked to the target group thus possesses special information of their issues. Advantage of this method is that it is fast, easy and affordable way to get a sampling, providing further connections to community resources (Rubin & Babbie 2013, 366). Kivenkolo's managers, ECEC professionals closely working with F2 and service design expert were selected as key informants in their fields.

Therefore, the sampling methods used for our research could be determined as mixed-methods: typical case sampling and key informants sampling. We selected typical representatives of the group of new arrivals. ECEC professionals closely working with F2 and service design expert were chosen by applying key informants sampling. Through Kivenkolo managers thesis authors obtained referrals to new arrival parents and one ECEC professional, through which we reached other ECEC professionals closely working with F2.

## 5.3 Research methods

This research is based on mostly qualitative and quantitative methodological approaches according to the objectives of the study. The qualitative and (quantitative method only used in F2 professionals located in (Table 7)) methods utilized in this study consist of face-to-face and online structured interviewing and directed storytelling.

Qualitative research is defined any type of research that produce findings that have not been obtained by other statistical procedures or other quantitative methods. It can mean research on human life, life experiences, behaviors, emotions, feelings, as well as the organization's activities, social functional ability, social movements, cultural phenomena where data analysis is mostly interpretative. Qualitative methods may be utilized to understand and discover

the meaning or nature of the experience of individuals both pick up the smallest details about everyday things such as feelings, thought processes, emotions that are difficult to pick up or study via more traditional research methods. (Strauss & Corbin 1996, 11).

By nature qualitative research is also a process where phases of the study cannot be structured into clear stages in advance nor can the research problem be accurately expressed or specified in the beginning of the study. The main principles and leading ideas of the study may also change or change altogether through the practical field experiences during the research process. Similarly, the solutions regarding the research task or data collection may take shape gradually as the study progresses. (Aaltola & Valli 2007, 70-71). Qualitative research answers the questions what, why, and how, therefore qualitative research knowledge is descriptive, diagnostic, evaluative and creative by nature (Tuulaniemi 2011, 144).

Cultural and social anthropology utilize ethnographic research as a viable technique. Over the last decade ethnography's role has grown more important in design research as organizations are more interested in gaining a more insight and understanding about their customers and target groups (Holston 2011, 171). Ethnographic research methods examine people in their natural conditions, with the aim of exploring their values, needs and wants. The researcher seeks to live genuinely a life moment of a research participant and embrace their perspective (Tuulaniemi 2011, 146). Ethnographic research observes people and their behaviour in context by the means of interviews or participant observation and directed storytelling, both research methods are qualitative. Therefore, the method is based on a holistic view, it involves listening to users, asking them questions, discussing about their work and activities both understanding their conduct in the context. (Hartson & Pyla 2012, 126).

### 5.3.1 Directed storytelling

Storytelling has become a popular way of communicating experiences and emotions, regarding any given topic field. As Juhana Torkki explains this method, we are living "a time of stories" at the moment. This is due to the fact that media and communication have developed and gained momentum in society. Life has become more complex and fast paced. In the information society simple stories or narratives appeal to peoples' sensibilities and limited time (Yle aamu 2014). The above articulates one of our main research methods: storytelling based on short narratives produced by actual service end-users.

Stories can be powerful and effective way in assisting people to "remember, persuade, and entertain." According to Quesenberry and Brooks, stories assist in building a connection between people. They can have the following functions: portray a background or occasion; narrate difficulties and issues; instigate a conversation about design; study a conception for a design; and illustrate the effects of a new design. (Quesenberry & Brooks 2010, 5). We see

identifying difficulties and issues as potential bottlenecks about an existing service and reveal ideas for a new service concept. The aforementioned reasons were compelling for this method's use in our study.

Experiences can be merely studied implicitly via stories which are reflections and reordering of the past. The application of ethnographic methods such as storytelling and emotional mapping targets to obtain a more profound comprehension of human experiences. Storytelling is a process that helps to create and communicate "relevance out of human's experiences." To sum, a story is an instrument to reflect and communicate the importance issued to our experiences. (Meroni & Sangiorgi 2011, 39).

Directed storytelling is a service design method that can rapidly bring up consistent patterns in human experiences which can be then processed and examined more. It rapidly reveals and illustrates what people do, say and think. A storytelling session team employs three people: a participant acting as a storyteller telling about a focal experience; a person facilitating a storyteller in their story and a documenter. (Meroni & Sangiorgi 2011, 69).

Directed storytelling inspires the respondents into the service experience as though they were engaging in the service process. This provides an opportunity to view research participants with empathy. After conducting the analysis other generative methods can be employed, such as journaling and emotional mapping methods. These methods generate results to be compared with the storytelling findings validating what people view as meaningful and important, while experiencing a particular service. (Meroni & Sangiorgi 2011, 69-71).

The session begins by asking a participant open questions such as asking them to tell about when, who, what, where and how one experienced something. During the session the documenter writes down important ideas from the story on post-it notes and puts them on the wall or big paper. These ideas are essential elements of the story being either emphasized by the storyteller or regarded important by the documenter. The more stories from the sessions are written down the richer the data is for interpreting and analyzing it later. During the session the team works in unity to sort out the ideas into clusters both to categorize each cluster by name. Thus the most common themes are determined according to the association with the particular experience. The data is finally gathered into an affinity diagram or map after the session. An outline can be also drafted that reveals the various themes and relationships between themes. (Meroni & Sangiorgi 2011, 69).

Authors applied directed storytelling method to gather data from foreign background parents. This method was chosen because it gave us possibility of deep exploration of new arrival families' experiences about F2 instruction provided to their children in the day care of Espoo.

Directed storytelling was also considered to be less time-consuming research method than interviewing. Using directed storytelling method researchers obtain data in the written form already in the session, thus they do not have to spend additional time to transcribe tape record, as it would be in case of interview. Directed storytelling was also assumed to reduce risk of misunderstanding between respondents and authors, since this method provides respondents with the possibility of checking correctness of their answers immediately after the session. Data gathered on post-it notes during directed storytelling sessions provided a sound basis for the affinity diagram analysis method to be used, described in Chapter 5.

### 5.3.2 Expert interview and questionnaires

A personal interview was arranged to collect data from a service design expert. By nature it occurs in a face-to-face situation where the interviewer asks questions from the respondent in an interpersonal exchange. When the respondent is considered an expert in his field, it is called an expert interview where he shares his expertise with the interviewer. (Frankfort-Nachmias & Nachmias 1992, 224).

Structured interview data collection method, also called a standardized interview, was used to collect data from a service design expert. The idea of this method is that "each respondent receives exactly the same interview stimulus as any other" that is questions should be read to all respondents in the same order and way (Bryman 2012, 210) and the form and order of questions are strictly prescribed beforehand. In our study the questions were predesigned with structured and themed questions to produce data to back up our thesis statement. The face-to-face interview with the expert was tape recorded with his permission and transcribed afterwards.

Questionnaires consist of open-ended questions, prepared for F2 professionals and sent and received by e-mail. Bryman refers to this method used in data collection from F2 professionals as an online social survey. It is not absolutely clear, how to regard this method - either as a "self-completion questionnaire" or as a structured interview," in a sense they are both." (Bryman 2012, 670). The method can be referred to as "asynchronous method of data collection," because communication between a researcher and respondent does not happen in real time and researcher does not receive the respondent's immediate response (unlike in synchronous data collection methods). (Bryman 2012, 658).

Compared with face-to-face interviews, an online social survey has advantages along with weaknesses. It is much easier to establish and maintain rapport between a researcher and a respondent face-to-face. Completion of questionnaire calls for more motivation from respondents and at times motivation is lacking to complete the questionnaire. At the same time answers to questionnaires sent and received by e-mail are more grammatically correct, since

respondents might have had enough time to think and edit their answers. (Bryman 2012, 668-669). Lastly, an advantage of this method is freedom in choosing time and place for questionnaire completion. Respondents can choose themselves when and where to reply.

#### 5.4 Validity and reliability

Criteria of credibility, trustworthiness and quality of the qualitative research depend strongly on the theoretical approach applied in the research. This study is formative evaluation of F2 teaching in ECEC of the City of Espoo conducted within the framework of traditional scientific research (Patton 2002, 542). Central idea of that approach is objectivity: researcher's objectivity should be maximal; biases should be minimized; research procedures should be carefully planned and findings should correspond to reality (Patton 2002, 544-545).

Concepts of reliability and validity originate from the idea, that a researcher can approach objective reality. However, it is important to remember that in a qualitative research all the data are handled through the prism of researcher's perception. And at the same time, qualitative research findings should reflect the respondent's perspective as much as possible. In qualitative research reliability concerns more researchers' activities than respondents' answers. Reliability concerns whether all available data were taken into account, were data transcribed in a right way et cetera. (Hirsjärvi & Hurme 2000, 185-189). The authors made all efforts to conduct our research in a scientific way.

There are three traditional ways to understand reliability concept. First, it may imply that research exploring for example the same person twice should produce the same results. Second, reliability may imply that the research results are reliable, if two researchers come to the same conclusion. According to the third perspective, reliability implies that by the means of two parallel research methods, the same result is obtained. (Hirsjärvi & Hurme 2000, 185-186).

Of these three reliability definitions each one has own threats. In the first case, the human ability to change with the time is not taken into account; the same person having twice participated to the same research may not produce the same results. Also taking into account that human beings' behaviour is prone to change according to the context, it is unlikely that usage of two parallel research methods may produce absolutely same results. Additionally, due to unique life experiences, different people are likely to interpret the same message at least in a slightly different way. Communication between researchers (and respondents as well) may help to establish consensus and common understanding between them, thus ensuring research reliability. (Hirsjärvi & Hurme 2000, 185-186).

In our study we sought to reliability. Communication between researchers and respondents played an important role in all phases of the research process. Presence of two researches during parent-respondent interviews added reliability via observation of the respondents; eliminating individual biases and analysing their data. Lastly, we verified each other's work for accuracy.

Validity as a concept originates from quantitative research, referring to the extent to which measurement, conclusion or a concept correlate to the reality and is well based. Cook and Campbell defined four forms of research design validity: 'statistical conclusion' (in Finnish: *tilastollinen validius*), 'construct' (in Finnish: *rakenne validius*), 'internal' (in Finnish: *sisäinen validius*) and 'external validity' (in Finnish: *ulkoinen validius*). Statistical conclusion validity concerns only statistical manipulations, thus is not applicable for this research. (Cook and Campbell 1979, referred in Hirsjärvi & Hurme 2000, 187).

A person being involved in qualitative research should understand how researcher's personality influences research already on the stage of data gathering. Researchers should understand that in qualitative research data and concepts are interpreted through the researcher's perspective; in fact in the process of research a researcher attempts to fit respondents' concepts to his own framework. In that situation the notion of construct validity becomes essential. (Hirsjärvi & Hurme 2000, 185-189). Construct validity concerns whether the given research really concerns what it is claimed to concern. The researcher should take into account not only own concepts, but also concepts proposed by respondents and other researchers. A strict concepts analysis is essential in order to reach overall research credibility, thus ensuring that research will really handle those issues which it was assumed to explore. (Hirsjärvi & Hurme 2000, 187). In our study a precise analysis of concepts used was performed and every attempt was made in order to ensure construct validity of the research.

In this research precise and continuous cross-checking of concepts and ideas of various parties was extremely important due to the usage of two languages throughout the whole research process. In the planning stages, the authors were prepared to use three languages (Finnish, English, and Russian). However, in the data collection stage Finnish and English were used, Russian was used on a case by case basis. Interviews with foreign background parents and questionnaires sent to F2 ECEC professionals were conducted in Finnish. The service design expert interview was in English. In general, using three languages throughout the implementation stage of the research along with its benefits had also downsides. On one hand, usage of two languages provided researches with wider opportunities for finding informants. On the other hand the risk of misunderstanding increased, because authors had to translate texts from one language to another. Therefore, authors had to monitor carefully the correctness of the translation of records such as interview questions and responses into English.

According to Cook and Campbell (1979, referred in Hirsjärvi & Hurme 2000, 188) when internal validity is involved, on the basis of the research data, a conclusion about causal relationships between two factors or variables is done not taking into account any third factors. Among various threats to internal validity respondents selection bias should be mentioned within the frame of this research. Though authors strove to minimize respondents' selection bias by precise respondent selection, some factors however might have left unnoticed. Also key informant sampling used for this research has also some challenges from the perspective of avoiding personal biases, but it is considered as a risk inherent for that type of sampling (Patton 2002, 236).

### 5.5 Ethical considerations

This research was done in an ethically responsible manner. Each interview is in fact an intervention into the emotional life of informant, more powerful than tests or surveys, so interviewing should be done carefully (Patton 2002, 405-407).

As Patton states it, the first important step is explaining to possible informants the goals of the research and methods applied (Patton 2002, 408). All groups of our informants received information about the research and its goals. The flyer was posted at Kivenkolo Center explaining our study. The flyer was written in Russian and English versions.

Presently, there are different approaches to confidentiality: confidentiality versus voluntary disclosure personal information by the informant him- or herself. In the latter situation, it is an interviewee who makes a choice, whether researcher should call him or her a real name or use pseudonym in the research report (Patton 2002, 411-412). A decision had been made not to disclose personal information of new arrival parents or ECEC professionals closely working with F2, since they preferred anonymity.

Researchers have a responsibility not only before informants, but also to the reader. In qualitative research well detailed descriptions are extremely important, since they help to place report readers virtually into the shoes of interviewees and show them the situation from inside (Patton 2002, 437-438). We put all our efforts in order to show different perspectives on F2 instruction in ECEC of the City of Espoo in a detailed and careful manner.



## 6 Data analysis

The purpose of the data analysis was to objectively discover how the City of Espoo Finnish as a second language ECEC services are experienced through parents' and teachers' point of view. Furthermore, the aim was to discover how service design can be applied to the public sector from the service design expert perspective. Therefore, the data were analyzed and interpreted by using an affinity diagram (parents' interviews) and thematic analyses (F2 professionals' questionnaires sent and received by e-mail and design expert's structured interview).

Content analysis implies "any qualitative data reduction and sense-making effort that takes a volume of qualitative material and attempts to identify core consistencies and meanings." Most often content analysis is involved in the text analysis process. "The core meanings found through content analysis are often called patterns or themes. Alternatively, the process of searching for patterns or themes may be distinguished, respectively as pattern or theme analysis." (Patton 2002, 453).

Themes are identified from data by researchers and are related to the focus of the "research and quite possibly the research question." Typically, the main criterion of identifying the theme is its repetition across the research data. However, repetition per se is not enough to declare some pattern as a theme. The pattern "must be relevant to the investigation's research questions or research focus." (Bryman 2012, 580).

This analysis used collected data from a structured interview of service design expert and social surveys of ECEC professionals (sent and received by e-mail) referred to as thematic analysis. Though it is one of the most often used analysis methods, thematic analysis does not have any "identifiable heritage" or "distinctive cluster of techniques" which could draw a clear line between this method and other methods used for qualitative data analysis. "Although qualitative researchers often claim to have employed thematic analysis, it is not identifiable approach." Thematic analysis implies searching for themes and this is "an activity that can be discerned in many if not most approaches to qualitative data analysis." Thematic analysis is "a remarkably underdeveloped procedure, in that there are few specifications of its steps or ingredients." (Bryman 2012, 578-580).

In general, the process of analysis may be described as follows: through the rigid process of reading and rereading of research data, first, smaller themes emerged and then second, they were united under bigger group themes. Both phases consist of forming of themes and bigger group themes.

However, regardless of the unclear status of thematic analysis among other qualitative data analysis methods, a decision was made to use it within the framework of this research, since it suited the best the goals of our study. A thematic analysis was regarded as a sub-approach within the wider concept of content analysis. In some respect affinity diagram method referred below and used for analysis of foreign background parent's data could be also referred as a thematic analysis in a sense and content analysis in a wider sense.

An affinity diagram is a data analysis and interpretation method to discover customers' needs and challenges. Affinity notes are collected during interpretation sessions to be used to construct an affinity diagram. The affinity diagram is the most efficient and the effective way to understand all of the main problems from the users' perspective. Several authors refer an affinity diagram as a data analysis and interpretation method used to discover customers' or users' needs and challenges. By combining all affinity notes on a board or wall, it is possible to visualize and understand the entire user group's problems collectively not just the individual problems (Huotari, Laitakari-Svärd, Laakko & Koskinen 2003, 64, 67; Miettinen 2011, 75).

An affinity diagram is a tool for organizing, analyzing and editing large amount of qualitative data collected from interviews into an understandable form. The method helps to understand and concretize the context of the research groups' current life situations, their needs, values, attitudes and desires. In essence, it helps to find the key satisfaction factors both important hidden relationships based on similarity. (Huotari et al. 2003, 66; Curedale 2013, 95). In addition, the affinity diagram analysis method requires at least two team members. Thus, the analysis is generated through consensus of the team. Besides, the data can become overwhelming when taken as a whole. In order to begin the analytical process, a peaceful space and a big white paper (3 meters times 2 meters) are required.

The research data consisted of approximately 250 post-it notes from parents and 120 written questionnaire answers from teachers. Each note contained recorded verbatim information from respondents. The next step included was formulation of an accurate research problem. This guides the research process from the beginning to the end. This helps the core of the problem to be thoroughly investigated. During the working session it was essential to group and regroup the notes, according to their content into comprehensible groups. Please see photographs below. The next step involved the team formulating appropriate titles to each groups by consensus with a certain connecting factor or theme. Then, these groupings were repeated several times so that affinities and their relationships were found to be represented as accurately as possible.



Pictures 1 and 2. Above photographs depict the 'affinity process.' The process begins by putting all the post-it notes on to a large blank sheet of paper or wall. This data is reviewed for similarities of the data. These similarities of data are called affinity groups because of their similar content. Top left picture shows a portion of the wall-size affinity group with the total data set. Top right photograph illustrates affinity groups. Top right photograph illustrates how specific hierarchical themes are formed from affinity groups.

## 7 Findings from parents

Key to this study was the service delivery problems from the perspective of parents of the children receiving F2 instruction. The bulk of the data generated was from new arrival parents on behalf of their children. Storytelling method allowed for 250 different little narratives or stories to be shared with the researchers based on their experiences of the F2 service delivery. As mentioned in the previous chapter, these were analyzed based on the affinity diagram. This analysis is explained briefly in the previous section. The random data had to be arranged based on things held together, hence the name of affinity diagram (see Table 1).

The authors discovered five affinity groups affecting children's F2 learning. These are 'Family's and child's background', 'Communication', 'F2 methods', 'Attitudes' and 'Organizational factors'. Refer to Table 1 left hand column called 'Finnish language development process' that includes stages of the educational process: initial age beginning day care, factors influencing F2 learning, child's age now and results in F2 learning. These are explained in greater detail in Chapter 6.2.

### 7.1 Factors influencing F2 acquisition

Two Meta themes emerged by the means of affinity diagram method - 'Factors which may influence F2 learning' and 'Finnish language development process'. This theme is built up from five themes categories which are supposed to be factors related to some degree to foreign background children's F2 learning. These themes were named 'Family's and child's background,' 'Communication,' 'F2 teaching methods,' 'Attitudes' and 'Organizational factors.' Note the above mentioned group themes also contain few sub themes, shown in the Table 1 below. All categories are related to F2 learning process. The formulation of group themes and

categorization helped to discover the “values, desires and attitudes of respondents (Huotari et al, 2003, 67).

### F2 Experiences

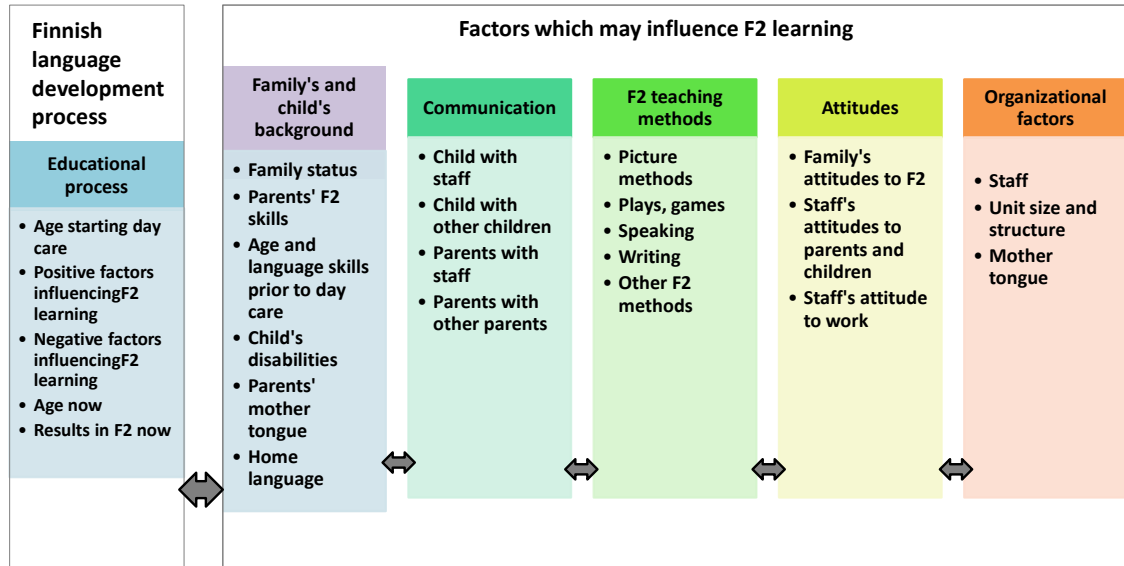


Table 1. Affinity diagram from parents experiences from storytelling data. The arrows illustrate interrelationships between each and every affinity group. For example, ‘Communication’ and ‘Attitudes’ can impact ‘Child’s attitude to day care’ based on F2 methods. In essence, each group may be interrelated either vertically or horizontally between the affinity groups. Each theme in an affinity group may interrelate to the adjacent affinity group in many different combinations.

The data revealed also key stakeholders: persons, groups or organizations that have a direct or indirect stake in an organization, because it can affect or be affected by the organization’s actions, objectives and policies. Oxford Dictionary defines a stakeholder as “a person with an interest or concern in something, especially a business.” (Oxford Dictionary 2015). For example, in our study we are not dealing with a business, but rather F2 education.

In the stakeholder map below, the red center is the family, service end-users, that are new arrivals or foreign background families immigrated to Finland. The next blue ring depicts the primary stakeholders that are F2 teachers and staff involved in F2 education: different therapists such as speech therapists and physiotherapists..., et cetera; other families; other day care teachers; different doctors and specialists (psychologists and other); consulting special education teachers and itinerant F2 teachers. In the next green ring are the secondary stakeholders: future school, relatives and friends; City of Espoo authorities and other authorities. The stakeholder map is illustrated in the Figure 1 below.

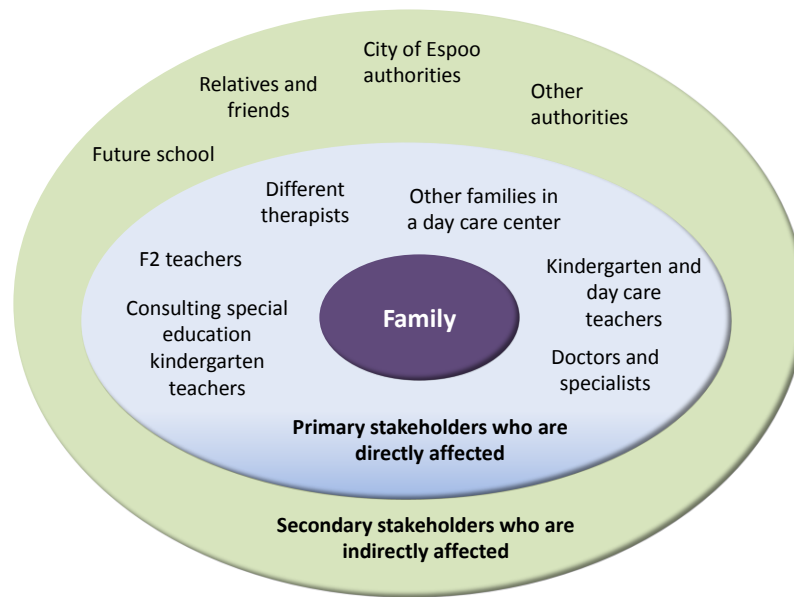


Figure 2. Stakeholder map shows in the purple center, a typical foreign background family with a child or children requiring Finnish as second language teaching (F2 teaching). The blue inner circle consists of primary stakeholders (primary entities interacting with children and family in F2 instruction). The green outer circle consists of secondary stakeholders, who are indirectly affected when children learn F2. (Ryynänen-McEwan, 2015).

#### 7.1.1 Family's and child's background

Our study is comprised of five mothers, who immigrated to Finland from Afghanistan, Ukraine, Russia, Morocco and Kurdistan. The group theme 'Family's and child's background' comprised of six sub themes: 'Family status', 'Parents' F2 skills', 'Age, skills starting day care', 'Child's disabilities', 'Parents' mother tongue' and 'Home language.' The 'Family status' theme refers to the marital status of foreign background respondents. The majority of contacted families consisted of both parents. One interviewee was a single-parent mother. Another respondent kept her family status private. Another respondent mentioned that she was alone with her child for the first two years of her residence in Finland and that her husband joined her only two years later.

Data gathered under the 'Parents' F2 skills' section, testified that Finnish language skills of all interviewed parents were at least on intermediate level (B1-B2 according to the Common European Framework of Reference for Languages, CEFR). 'Parents' mother tongue' group category shows the diversity of various language backgrounds collected within our research. In two families both parent were native speakers of two languages: Russian and Ukrainian, Uzbek and Dari. In other families parents were native speakers of one language: Russian, Arabic and Sorani (Kurdish). This gives the idea of the diversity of mother tongues within just one family.

The sub theme 'Home language,' is closely related to theme of 'Children group linguistic background,' which is studied in the Chapter 6.1.5. The theme 'Home language' had no discernible pattern. Another respondent did not reveal her home language. In one family, where both parents spoke Dari and Uzbek, the only language used at home is Uzbek. In the Russian-Ukrainian speaking family the main home language is Russian and English, however, Ukrainian and Finnish languages are also used. In the family with a single-parent, the Finnish language is used more extensively in addition to Arabic, thus, Finnish language became the mother tongue of her child:

- *"Finnish is (child's) first mother tongue, sometimes Finnish is spoken also at home."*

We studied five parent-respondents on behalf of their six children in total. Mothers of four children shared details of their children's background information. During data gathering, children's ages ranged between four and eight years old. Two four-years-old children were still attending a day care and other four, seven to eight years olds were attending school.

The sub theme 'Age and language skills prior to day care,' mothers confirmed that their children did not know any Finnish language before starting day care. According to the data four children started at the day care ages ranging from 1 year 4 months to 3 years old. Mother of two children did not reveal this information. Also one parent proposed starting day care later:

- *"It would be good, if children could start day care at the age of three."*

This suggestion is quite interesting from the point of view of a child's language development. At the age of three, the first language of the child should be developed. Thus, the Finnish language could be acquired on the basis of more or less developed mother tongue. In fact, that particular respondent proposed to provide parents the possibility to develop their children's first language first, and only when some foundations of the first language are acquired. Then the child would receive F2 instruction, thus becoming sequential or consecutive bilingual (Bhatia & Ritchie 2013, 112-113).

Under the sub theme 'Child's disabilities' out of six children, only three were considered typical healthy children. Two were deemed as special needs children. The last child's grouping; the mother mentioned a positive evaluation of her child's Finnish language skills conducted by her speech therapist. Incidentally, this child fell into neither category 'special' nor 'normal.'

### 7.1.2 Communication

'Communication' as a group theme is the verbal interchange between children, day care staff and parents. The sub theme 'Child with staff' dealing with communication was considered to play a critical and essential role in development of children's F2 skills. The quality of ECEC

teachers' Finnish language skills was considered to be important from the parents' point of view:

- *“Teachers speak in a calm manner, good, slow speech, pictures are used, and in the morning circle something is done.”*
- *“It is good, if someone speaks clear Finnish language in day care.”*

The sub theme ‘Child with other children’ communication played an important role in development of F2 skills from the point of view of parents as end-users. They admitted that the lack of communication for a variety of factors may have a deleterious impact on F2 skills development. At the same time communication with Finnish native children was considered to stimulate development of foreign background children’s F2 skills:

- *“My child chose Finns to become friends. My child tried to learn how Finnish children speak good Finnish language.”*

The sub theme ‘Parents with other parents’ dealing with communication, demonstrated little or no influence on development of children’s Finnish language skills. Apparently, the majority of parents did not have time for such communication or interchanges with their peers:

- *“I did not speak with other parents. I did not have time for that.”*

The sub theme ‘Parents with staff’ communication revealed that parents estimated their communication with day care staff in very opposite ways; their experiences were either positive or negative with few neutral comments. However, statistically speaking, the sampling pool is too small for generalizations. Communication between children and parents may have some influence on the development of children’s Finnish language skills. That topic will be looked at in Chapter 6.1.4. dealing with attitudes.

### 7.1.3 F2 instruction methods

Under this group theme, direct and indirect F2 instruction methods used in day care were explored. According to our respondents, day care staff used traditional ECEC teaching methods to help foreign background children acquire Finnish language skills:

- *“Big group and F2 tasks. Stories.”*
- *“Games, plays, songs, visual materials, teaching about the weather in circle.”*

Some parents mentioned speaking the language and playing games as important means to their children’s Finnish skills development. Also, one respondent proposed to introduce more games into day care routines as a beneficial method for children’s F2 learning development:

- *“Child spoke...Finnish language (entire days) with other kids and staff in kindergarten.”*

- *“Positive factors which help to develop F2 language: speaking, pictures, learning through playing with other children.”*
- *“It would be good to use more developing games. Children should play with day care workers and speak with them. This would train them to use Finnish language.”*

However, some parents expressed that books reading, use of pictures and other F2 methods are not enough, and that some other methods should be added to the current day care education repertoire or even the whole F2 instruction system should be renovated in order to better suit for purposes of teaching Finnish language to foreign background children:

- *“Pictures (Papunet) are a good idea. How Finnish language develops, I am not sure. It is not enough.”*
- *“... they have to be professionals, to study more how to organize, how to teach F2 to foreigners. Usually everything is tailored for Finnish children.”*

Additionally, teaching to write in Finnish was mentioned by one respondent. In her opinion, her children lacked F2 writing exercises:

- *“Day care does not help enough to learning of writing skills. Not enough teaching of writing skills.”*

In general, respondents' opinions about F2 instruction their children received in day care varied widely. Some parents merely listed methods used in day care and were quite satisfied with them. At the same time some respondents expressed the need for introduction of new F2 educational methods or even reorganization of the whole F2 instruction system. This would suit foreign background children's F2 learning goals in the best way.

#### 7.1.4 Attitudes

Attitudes are an ephemeral field. However, attitudes may have a strong impact on children's Finnish language skills development. Knowledgeable parents have positive attitudes towards their child's learning and “provide the child with positive model of use of a new language” (Halme & Vataja 2011, 23). Positive or negative family attitude towards Finnish language may help or impede a child's learning Finnish language. Parents may support F2 at home or completely ignore it:

- *“Family's negative attitude towards Finnish language spoils the child's perception of Finnish language. It is not a secret that many parents have a very negative attitude to life here, very dissatisfied with the situation... do not learn Finnish language themselves and there is no positive example. Many people working here in general perceive residence in the country as a long business trip, emphasis is done on study of Russian language, child is developed as one pleases, but without encouraging of*



*Finnish language learning. At home everything related to Finnish language is ignored, even TV.”*

- *“At home, the Finnish language is also supported, though staff did not take parents seriously.”*

Staff attitudes towards parents’ or children’s skills may also be an important factor for F2 learning. As mentioned above, parents felt that day care workers did not take them seriously. They did not believe that parents were able to teach children Finnish language at home. Also, day care staff’s assessment of the children’s abilities may depend on their attitudes:

- *“Very often with a foreign background child - if the child does not speak...has a problem. Is a special child. It is not so.”*
- *“...It was a surprise for staff that in the integration group my daughter was able to speak Finnish.”*

Day care workers’ attitudes towards their work were considered to be important for the quality of their work and experiences with the children:

- *“Experiences of the child depend on teachers, if a teacher likes to be with children, good or if they work just for salary, bad.”*

Parents’ attitude to the teachers work may influence children’s attitude towards day care in general. Additionally, children’s attitude towards day care may play a role in his or her F2 skills development. However, there is no obvious, direct connection was found in either case.

#### 7.1.5 Organizational factors

‘Organizational factors’ as a group theme, concerns all the factors related to organization of the early childhood education—both on the level of a tangible day care or on the higher level of the decision-making such as the management with the Espoo City. ‘Organizational factors’ as a group theme is comprised from the following categories: ‘Staff,’ ‘Unit size and structure,’ and ‘Mother tongue.’ See Table 2 depicting the three smaller categories with their sub themes listed below.

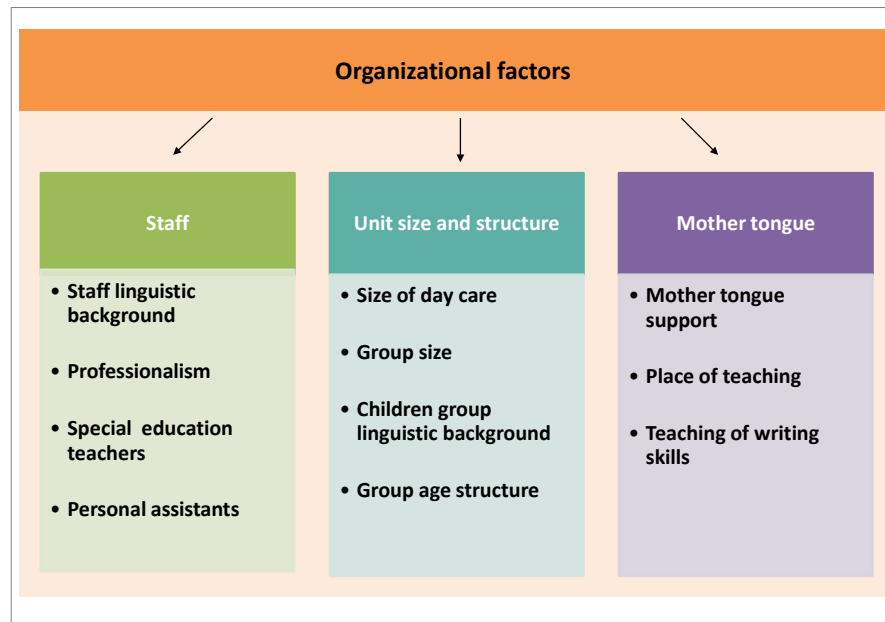


Table 2. Organizational factors are broken down further in categories and sub categories based on sub themes.

In Table 2 ‘Staff’ concerns everything related to staff in the day care consisting of ‘Staff linguistic background,’ ‘Professionalism,’ ‘Special education teachers’ and ‘Personal assistants.’

‘Staff linguistic background,’ as a sub theme, concerns mother tongues of staff members or the lack of them among staff. Surprisingly, two parents expressed completely opposite views on the ethnic background of day care workers. One respondent was concerned about the development of F2 skills of foreign background children. They would prefer not to have foreign background workers employed in the day care. They prefer to learn proper Finnish pronunciation and diction. On the contrary, another mother respondent expressed the need to have more foreign background workers in day care in order to support the mother tongues of foreign background children. This would improve communication between staff members and children. Also, she noticed that if none of the teachers spoke the mother tongues of the children, staff may form an inaccurate opinion about children’s language skills. This would be true even if the translation service is well organized:

- *“I do not advise foreigners to work in a kindergarten, at school it is ok.”*
- *“I would like to have more teachers in day care that would be able to speak mother tongues of children.”*
- *“There is a test, when children are 4 years old. Often, these children do not understand it. The interpreter is an unknown person, thus increasing their stress. Therefore, the teacher forms the wrong opinion about child’s language skills after being tested with an interpreter.”*

Under the sub theme “Professionalism,” parents as end-users’ assess the quality of the educators’ work which varied from either highly positive to highly negative. Also, one parent emphasized expressively—the idea of how important it is for the staff to be ‘professional.’ According to one respondent, teachers need not “*overestimate*” their own professional knowledge. Additionally, teachers are expected to be able to integrate the children into the group and organize their work well:

- *“Good happy teachers are organized by the City of Espoo.”*
- *“One teacher was lazy.”*
- *“Very often staff overestimates their own knowledge and blame the child, saying that the child has problems, when the child is shy to speak.”*
- *“Teachers have to be more professional how to integrate and how to organize.”*

None of the parents mentioned F2 itinerant kindergarten teachers. However, almost every respondent mentioned special education teachers and day care staff involved in F2 teaching. Parents seemed to communicate with day care staff and/or special education teachers on a frequent basis. Consequently, parents expressed opinions and ideas only about educators, with whom they had formed good working relationships.

The sub theme ‘Special education teachers,’ parents expressed the strong need for professional and experienced special education teachers. In general, respondents’ evaluation of their work varied from positive to negative. Furthermore, the special education teacher was considered important for children’s F2 development. Another respondent proposed that special education teachers should permanently work in the same day care and not, consult merely once per month. This respondent stated that it would ensure more reliable evaluations of children:

- *“Special education teacher should see children every day and in different situations. They should work in day care and not come to visit.”*
- *“Has not always had own special education teacher that impeded learning of F2 skills.”*
- *“Special education teacher should have a lot of experience.”*
- *“One special education teacher does not seem professional.”*

The sub theme ‘Personal assistants’ emerged, when one respondent above requested that special needs children may have a personal assistant in the day care center, emphasizing the assistant’s role in the child’s F2 learning:

- *“If a child does not know the language (Finnish), then it is better if a child has their own assistant, who assists and teaches more (with learning material).”*

The group theme 'Unit size and structure' comprises of four sub themes 'Size of day care', 'Group size,' 'Children group linguistic background' and 'Group age structure.' Under this group theme, parents expressed their views on the possible impacts of day care and children's group size as well as its age structure.

Only one respondent paid attention to the theme 'Size of day care,' expressing positive views on small day cares from the perspective of F2 instruction:

- *"F2 teaching is better organized, if a day care is small."*

'Group size,' as a theme concerns the size of a F2 language group. This theme received much attention from the end-users. The majority of parent-respondents complained that children groups in their day care were too large impeding the individual child's F2 learning. One respondent claimed that even in day cares offering special education, teachers to children ratios should be smaller. Another parent confided about her child attending an integration group. She expressed a negative opinion about the usual larger group, but was highly positive about the integration group. She cited fewer children per F2 instructor in the integration group was a positive factor. All parents emphasized that in a smaller group the child receives more attention from the F2 teacher:

- *"There is a big group (about 21 children and 3 adults)...Special needs children need a smaller group. They receive more attention in this improved method of instruction."*
- *"The normal group is too large: 22-24 children and 2 adults."*
- *"In a special day care there should be 1-2 children per teacher."*
- *"In the integration group, F2 teaching is better than in the general group. My child received more attention and feedback. Consequently, her motivation increased...that produced better (F2) results."*

The sub theme 'Children group linguistic background' deals with the 'language profile' of the day care group, whether Finnish native speakers in the group or whether speakers of other languages constitute the majority. The presence of native Finnish speakers in F2 groups was considered important by at least one parent-respondent. Another considered it important for the day care staff to take into account the children's linguistic background:

- *"In the day care there were many Finnish native speakers. This was better for my boy. Now he has a bigger vocabulary."*
- *"12 children, 3 teachers, half Finnish native speakers and half (of children) had foreign background."*
- *"Children's background should be taken into account. It is important, what kind of language are spoken by the family."*

‘Group age structure’ in children’s groups was considered to be important for F2 development. One respondent reported that her child had a *“horrible experience,”* being first placed to a group consisting of much younger children. Then she was moved to a group of much older children, creating an incompatibility. Her F2 skills did not develop well:

- *“She spent one year with much younger children. It was a big mistake by staff. She learned nothing.”*
- *“When my daughter was 3,5 years old, she spent several months with 5 to 6 years old children. My daughter was alone and separated.”*

‘Mother tongue’ group theme received considerable attention from respondents. This theme consisted of three smaller topics ‘Mother tongue support’, ‘Place of teaching,’ ‘Teaching of writing skills.’

According to the sub theme ‘Mother tongue support,’ almost all parents reported having received little or no mother tongue support from their child’s day care:

- *“I had no experience of support of mother tongue in day care.”*
- *“Nobody told us (parents) that we had right to mother tongue teaching in kindergarten. I found later, when children were placed in school.”*
- *“Only once day care teacher gave me pictures cards, so that I would speak to my child in his mother tongue.”*

Under the sub theme ‘Place of teaching,’ one parent-respondent emphasized the need for mother tongue to be taught in a day care closer their home....:

- *“Teaching of mother tongue should take place at the day care.”*

Lastly, under the sub theme Teaching of writing skills,’ one respondent proposed not to teach children writing skills in mother tongue in a day care:

- *“Teaching them to write in their own mother tongue should happen at school. There should be no teaching before school.”*

The group theme of ‘Organizational factors’ engulfed a wide variety of topics concerning day care organization. Foreign background parents expressed highly positive views on smaller day care centers and groups, emphasizing that smaller child per teacher ratio provide children with more educators’ attention, thus better facilitating their F2 development. Some parents also paid attention to the age structure of children groups. They confirmed that very big differences in ages between children placed in the same group may be unfavorable for their F2 development. Foreign background parents assumed that Finnish speaking children facilitate F2 learning of foreign background children attending the same group through the process of intergroup communication.

Respondents' views on teachers' professionalism and quality of work varied widely, from highly positive to very negative. In general, parents emphasized that day care workers irrespective of their job title should be professional. One respondent proposed to hire more special kindergarten teachers that taught on a more regular basis from the day care rather than being itinerant. This would increase with the amount of time spent with children and being able to provide more accurate evaluations of children's language skills.

The majority of respondents reported to have received little or no support for the development of children's mother tongues at their day cares. Being concerned about development of children's mother tongues, one respondent proposed to hire foreign background staff to work in the day care, in order to support their mother tongues development. However, another respondent proposed that only Finnish native speaking workers teach in kindergarten, thus facilitating children's F2 skills development. In conclusion, there are differences of opinions about organizational factors improving F2 instruction.

## 7.2 Finnish language development process

Under this Meta theme of 'Finnish language development process,' different perspectives and themes are listed: 'Age starting day care,' 'Positive factors influencing F2 acquisition,' 'Negative factors influencing F2 acquisition,' 'Age now' and 'F2 results now.' These subthemes deal with positive and negative factors that may influence F2 learning. (See Table 1, page 44). Thus, the authors arranged a logical order, based on a child's chronology from the beginning to end, in the day care context. This way the authors had the possibility to trace F2 learning path ways of actual children and see how various factors influenced children's final F2 attainment. Lastly, to see what kind of Finnish language skills the children possessed at the moment of the initial interviews (see Table 3 below).

Four children started day care between the ages of 1 year and 4 months and 3 years old; and two children ages were unknown. None of children had any experience or knowledge of Finnish language before starting day care. During our data gathering, four children were 7-8 years old and two children were 4 years old.

Among the 7 and 8 years old children, neither were special education children. Irrespective of variety of positive and negative factors all school age children have been reported to have achieved either very good F2 skills or level of Finnish native speakers despite differences of age when they began day care. The results of the 4 years olds were not favorable due to their age. This was based on their language skills, still are in the process of development. One four year child started day care at the age of 1 year 5 months. The mother of the second child did not reveal any age data. Poor F2 results may have also been the result of special needs of

both children. However, the sample is statistically too small to make any general assumptions.

Child number	Age starting day care	Positive factors influenced F2 acquisition	Negative factors influenced F2 acquisition	Age now	F2 results now
1	3 years	<ul style="list-style-type: none"> <li>Attended small group day care.</li> <li>Experienced day care staff with positive attitude.</li> <li>Child chooses Finns to become friends.</li> <li>Full family.</li> </ul>	<ul style="list-style-type: none"> <li>In the beginning difficulties with other children.</li> <li>Long adaptation process to day care.</li> <li>No support of mother tongue in day care.</li> </ul>	7 years	Finnish language is equivalent to native Finnish speakers. Russian language is fluent. Reads in both languages.
2	1 year 4 months	<ul style="list-style-type: none"> <li>Healthy child.</li> <li>Professional staff.</li> <li>Good working cooperation between mother and staff.</li> <li>Sociable child, good communication with other children.</li> <li>A lot of Finnish native speakers in day care.</li> </ul>	<ul style="list-style-type: none"> <li>No support of mother tongue in day care.</li> <li>Mother is a single-caregiver.</li> </ul>	7,5 years	Large vocabulary in Finnish language. Finnish is a first mother tongue. Finnish is spoken at home at times.
3	2.5 years	<ul style="list-style-type: none"> <li>Healthy child, though educators supposed that child had special needs.</li> <li>Positive family attitude towards F2, parents' attempts to develop child's F2 at home.</li> <li>Integration group helped F2 development</li> <li>Full family.</li> </ul>	<ul style="list-style-type: none"> <li>Child spent about 1.5 years in inappropriate age groups that impeded F2 development.</li> <li>Difficult relations between parents and day care professionals.</li> <li>Non-professionalism and negative attitude of educators.</li> <li>No support of mother tongue in day care.</li> <li>Too large group during first 1.5 years in day care.</li> </ul>	8 years	Very good Finnish language skills (written or verbal language skills were not specified).
4	Not revealed	<ul style="list-style-type: none"> <li>Healthy child.</li> <li>Received more help with F2, than younger sibling.</li> <li>Attended speech therapist once a week.</li> </ul>	<ul style="list-style-type: none"> <li>Not enough teaching of writing skills in Finnish was provided in day care.</li> </ul>	8 years	Has not learned proper F2 writing skills yet. Speaks Finnish well.
5	Not revealed	<ul style="list-style-type: none"> <li>Uses services of different special therapists.</li> <li>Attends special education day care.</li> </ul>	<ul style="list-style-type: none"> <li>Special education child.</li> <li>Not all therapy services are exemplary.</li> <li>Child does not have assistant in day care.</li> <li>Has not always had own special teacher, that im-</li> </ul>	4 years	Speaks Finnish a little.

			<ul style="list-style-type: none"> <li>peded F2 development. Child was placed in a large group.</li> </ul>		
6	1 year 5 months	<ul style="list-style-type: none"> <li>Child attends speech therapist.</li> <li>Attends appropriate age group.</li> <li>Staff works well.</li> <li>Good cooperation between parents and staff</li> </ul>	<ul style="list-style-type: none"> <li>Special education child (only speech).</li> <li>Both parents, but first 2 years of child's life mother was alone.</li> <li>Earlier child did not like to be in day care.</li> <li>Lonely child, almost no communication with other children.</li> <li>Very little mother tongue support.</li> </ul>	4 years	Both languages are equally weak, not good phrases. Speaking is poor.

Table 3. Represents children's starting points, positive and negative factors cited and F2 final result (language competency) above. (Polina Poletaeva 2015).

### 7.3 Steps in Finnish language acquisition

Data revealed certain important factors, service touchpoints in delivery of F2 teaching services. The map revealed several bottlenecks related to F2 learning process and ECEC F2 services in language acquisition pathways. Here the families with children are identified as the customers. Below is a customer experience map created from storytelling sessions consisting of service touchpoints and customer experiences. The selected notes in the customer experience map chronicle major day care events and experiences as stated by child's parent. Highlighted are the most important interactions with various primary stakeholders in F2 instruction. The customer experience map is illustrated below with developmental pathways as described by two respondents A and C (two different parents with opposing views and experiences, one positive and other negative).

Figure 3 below represents, how the level of F2 teaching services can be perceived differently by different customers (parents is equivalent to end-users). Experiences may vary widely because of different customer experiences. Experiences that are most negative provide 'opportunities for design' and development (Curedale 2013, 119).

First, this study of customer experience map indicates the quality and size of the children's group; how it affects child adjustments and learning of F2 in the day care. Secondly, it shows what is the professional conduct of the teachers? For instance, how much time and resources the staff devotes to each child. Thirdly, how much the child needs special education services as to facilitate F2 learning to improve coping in the classroom? Are services provided in a timely fashion? Are special education or integration services provided based on the children's needs? Fourth, does the classroom provide a separate F2 kindergarten teacher in addition to the main early childhood education teacher? Lastly, how are the parents treated in this educational process? Are they praised or blamed? Are they included in the process of



teaching their child new language skills or excluded? Negative answers to the above cited questions revealed bottlenecks.

According to the Ministry of Education, the starting point of F2 teaching is based on the student's Finnish language existing proficiency. Groups should be formed in accordance to the language proficiency levels. Furthermore, it is important to take into account the student's age. Therefore, different levels or big differences of ages should be avoided in group formation. (The Finnish National Board of Education 2008, 6-7).

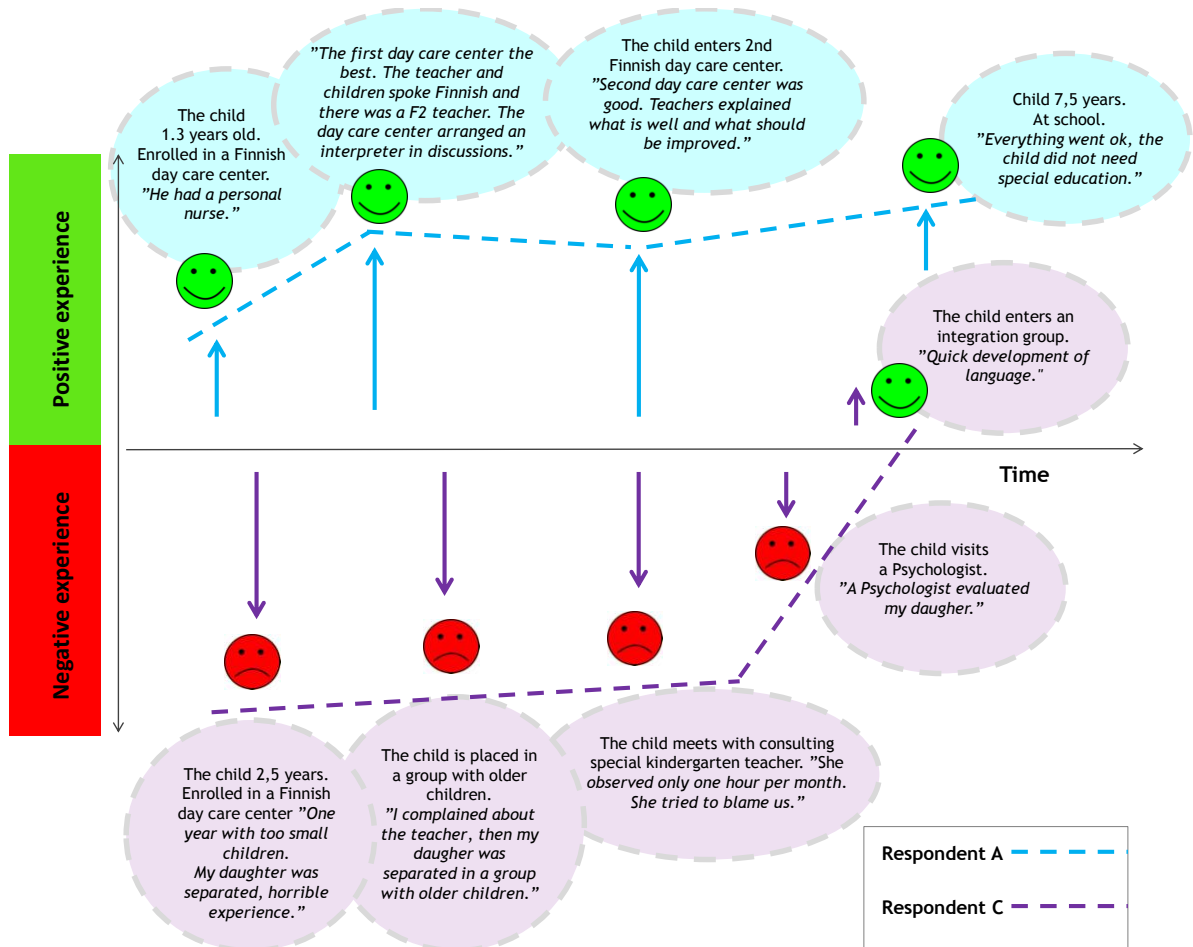


Figure 3. Customer experience map visualizing parent's F2 experiences is depicted above. Experiences and activities are situated around the baseline and timeline according to their negativity or positivity depicted with a red or green face. Illustration is based on two respondent's stories which reveal that they had entirely different experiences and emotional perceptions about F2 teaching. (Curedale 2013, 118; adapted by Rynnänen-McEwan, 2015).

#### 7.4 Parents' ideas for development

In this section, the parents' ideas for development are explained in detail. These ideas are based on the data analysis conducted. These ideas are comprised below as factors which may better support children's F2 acquisition—directly or indirectly. Overall, the parent's ideas were combined into 8 groups themes, which could be seen in the Table 4 below.

<b>Mother tongue</b> <ul style="list-style-type: none"> <li>▪ Support of mother tongue is strongly recommended;</li> <li>▪ Teaching of mother tongue should take place at the same school- / day care;</li> <li>• Teaching children to write in their own mother tongue should happen at school.</li> </ul>	<b>Linguistic background of day care staff - 2 perspectives</b> <ul style="list-style-type: none"> <li>▪ Day care workers should be native Finnish speakers so that children can learn proper Finnish;</li> <li>▪ Foreigners with fluency in children's mother tongues: ensure communication channels between children and staff help to develop children's mother tongue.</li> </ul>	<b>F2 methods</b> <ul style="list-style-type: none"> <li>▪ Revamping of the education system: F2 teaching tailored for foreign background children. Children's mother tongue should be taken into account;</li> <li>▪ Utilize variety of F2 methods such as language games and creative play instead of overreliance on pictures and reading books.</li> </ul>	<b>Staff</b> <ul style="list-style-type: none"> <li>▪ F2 professional F2 skill sets upgraded through additional training and multicultural education;</li> <li>▪ Special needs child should have own assistant, who would help also with F2 teaching;</li> <li>▪ Hiring full-time special education teacher instead of itinerants would ensure proper assessment of children's skills and placement to proper group.</li> </ul>
<b>Children's group size and quality</b> <ul style="list-style-type: none"> <li>• F2 group sizes should be smaller and adjusted for children with special needs: one day care worker per 1-2 in special day care if feasible."</li> <li>• Placement of children into right age group.</li> </ul>	<b>Day care size</b> <ul style="list-style-type: none"> <li>• F2 teaching is better organized in a small day care.</li> </ul>	<b>Staff attitude to work</b> <ul style="list-style-type: none"> <li>• More day care staff hires, who like to be with children.</li> </ul>	<b>Age starting day care</b> <ul style="list-style-type: none"> <li>• Later starting of day care was proposed - at the age of 3 years old, thus allowing child's mother tongue time to develop before starting F2 instruction.</li> </ul>

Table 4. Parents (end-users) ideas for development are depicted above, but are unranked.

Parents hope to have day care more workers who are sincerely interested in working with children. Children's experiences depend on ECEC professionals' attitudes to their work with children. The above-mentioned developmental ideas offered by parents, specifically referencing staff attitudes is the most ephemeral and difficult area for service producers to organize in practice. Through the day care hiring process, day care managers examine applicants to find the best fit, meeting the required qualifications. The day care work demands more than just job qualifications and experience; it demands a real love and high motivation to teaching new arrival children F2. Since teachers' attitude to work influences the children's experiences, it seems to be an indirect factor impeding or supporting children's F2 learning.

## 8 Findings, data from teachers interviews

The next phase was to conduct a thematic analysis on data collected from teachers questionnaire via e-mails. Fifteen subthemes were identified from three general categories, Meta themes of ‘Ideas for development,’ ‘Current challenges’ and ‘Currently works with F2 teaching and methods’ (see Table 5). The categories ‘Current challenges’ and ‘Ideas for development’ revealed issues or bottlenecks in delivering F2 services within the current system.

These analyzed categories also represent primary and secondary stakeholders interacting directly or indirectly with children and families in F2 instruction. These stakeholders included F2 teachers, different therapists, and other families in a day care center, ECEC teachers, consulting special kindergarten teachers, doctors and City of Espoo authorities.

All teachers interviewed had over eight years of teaching experience. The teacher with the longest teaching experience had taught eleven years. One itinerant F2 kindergarten teacher was responsible for sixteen day care centers. Another itinerant F2 kindergarten teacher visited fifteen day care centers. One teacher-respondent summed up the main goal of F2 teaching: “children become a part of Finnish society from an early age.”

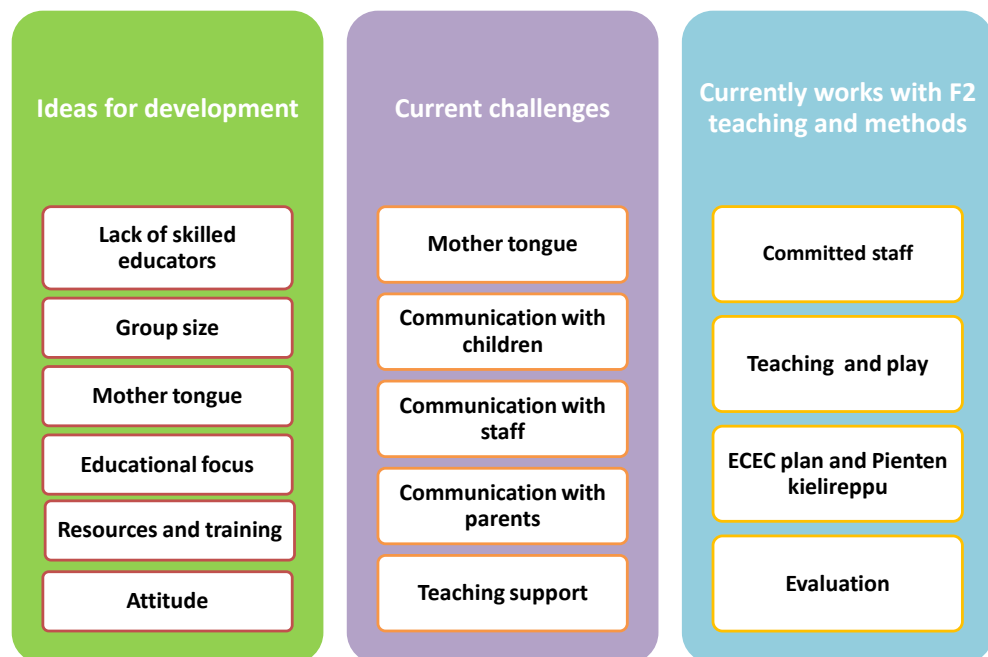


Table 5. Teachers’ data analysis is depicted above by using thematic analysis.

## 8.1 Ideas for development

Teachers shared their thoughts and concerns about successful and unsuccessful F2 teaching experiences and discussed improvements in response to our questionnaire that was emailed to the respondents in the fall of 2014.

The first Meta group theme is 'Ideas development' that includes six sub-themes such as 'Lack of skilled educators,' 'Group size,' 'Mother tongue,' 'Educational focus,' 'Resources and training' and 'Attitudes.'

### 8.1.1 Lack of skilled educators

The first sub-theme of "Lack of skilled educators" consisted for instance teacher-respondent recommendations about the inadequacy of F2 teachers. It was recommended to increase the numbers of F2 kindergarten teachers per group of children. This increase should be for F2 kindergarten teachers to visit the class room 4 times per month. One teacher-respondent explained that increasing the amount of F2 kindergarten teachers would provide more time devoted to with each child thus improving their language skills. Below are the qualitative data or statements concerning this sub-theme:

- *"There should be more F2 kindergarten teachers, so that every child would have more time with each child."*
- *"F2 kindergarten teacher visits our group 2 times per month. It would be more useful if their visits would be weekly."*
- *"Each group in a day care center should have a F2 teacher of their own. This would help the group."*

One teacher-respondent expressed a need to employ properly educated and trained F2 kindergarten teachers. Each group in a day care receiving F2 instruction should have their own individual F2 kindergarten teacher. Another teacher-respondent stated that ideally there should be 2 teachers per group in order to receive more equal division of labour within their group. This would facilitate the interchange of ideas to be more stimulating and relaxed or less stress on each teacher:

- *"There should be enough educated and linguistically skilled educators in every group."*
- *"Each day care center should have their own F2 kindergarten teacher who would help their group."*
- *"There should be two kindergarten teachers to each group, in order the division of work and exchange of ideas to run smoothly and naturally."*

### 8.1.2 Group size

According to data, decreasing the group sizes would enhance the individual child's participation and learning. Increase of the teacher to child ratio, by decreasing the size of the group of foreign children. There is a need for more targeted and individualistic custom tailored training or teaching per child. Based on responses, smaller groups are also conducive to enhanced learning, because they function more efficiently and provide a safe and relaxed learning environment. The main ideas of the teacher-respondents are stated below:

- *"Group sizes should be made smaller, in order to have time for each child on a daily basis."*
- *"Small groups" are needed that are "peaceful, relaxed, safe (environment) and functional."*
- *"Group sizes should be reduced. Regular consultative assistance and targeted training" will improve foreign language learning."*

Lastly, data revealed that F2 teaching should take place in 'small and heterogeneous groups.' Additional benefits result from an individual child being placed in a group based on similar characteristics of language. One teacher-respondent stated language acquisition will be enhanced with:

- *"Heterogeneous small groups."*

### 8.1.3 Mother tongue

Teacher-respondents expressed that it is more useful to combine the learning of one's mother tongue with F2 teaching. Moreover more resources are needed to support a child's mother tongue strengthening the child's identity. Finally, the continuity and consistency of learning a mother tongue was emphasised:

- *"Also the utilization of one's own mother tongue in learning of F2 could be developed further."*
- *"Support of own mother tongue should become conscious and continuous."*

### 8.1.4 Educational focus

The next sub-group theme is 'Educational focus.' The teacher-respondents stressed that language learning is improved dramatically through a immersing in language. Furthermore, language learning improves when this activity is conscious and planned throughout day. One teacher-respondent emphasized the importance of continuous learning throughout the day enabling the conscious F2 learning. Therefore, classroom disruptions should be minimized. Then educators can focus on educating instead of disciplinary or other actions. Below the teacher-respondents expressed their views:

- *"In many groups, the most essential task is for educators to concentrate on education, in a way that other tasks and meetings would be minimal."*

- *“Education should be conscious and planned, not necessary during the activity moments and circles, but instead the whole day is a F2 moment, when this is done consciously.”*

Another teacher-respondent stated that F2 teaching requires an environment tailored for individualised instruction based on *“accurate observation.”* This is to ensure that a special needs child is given special education or that a child is put into the proper integration group. Furthermore, F2 teaching could be strengthened by incorporating useful ideas of parents to their child’s education. F2 teaching techniques and results should be *“visible to parents,”* however she failed to explain how to achieve this goal.

- *“Accurate observation. Learning environment is adjusted according to the teachers.”*
- *“Making work of F2 teachers visible to parents is lacking from the current system.”*

#### 8.1.5 Resources and training

The next sub-theme group is resources and training. Some of the ideas are paraphrased because they are too lengthy. They expressed that the work load should become more *“reasonable.”* However, this was not expressed clearly how to accomplish this. They may have expressed this in the preceding chapters, such as creation of smaller groups and supplying of more professional teachers to each educational district. One teacher-respondent requested more resources especially for training of the F2 methods. Additionally, itinerant special education kindergarten teachers should be supported.

- *“Amount of work should become more reasonable. There should be more training and new ideas for everyday life in addition to pictures.”*
- *“There should be additional resources and training about the methods in order that the days are utilized better.”*
- *“In Espoo F2 kindergarten teachers are itinerant. There should be support for an itinerant special education kindergarten teacher.”*

One teacher-respondent expressed the importance of investing in creating an effective and continuous learning environment. This entails including the parents to become more active in teaching mother tongue to their children. Children learn most when they are *“active actors”* in their learning while the adults provide mentally and physically effective learning environment and appropriate level language activities.

- *“Effective learning environment should be invested. For example parents should be activated more from their own mother tongue point of view. Continuous learning should be guaranteed.”*
- *“In ideal F2 learning system the staff creates mentally and physically effective learning environment, where the child feels they belong and where they work as active actors.”*

*“Educators pay attention to their knowledge of language and provide activities at an appropriate level.”*

Additionally, one the teacher-respondent requested a bonus salary in cases when they are in charge of a big F2 learning group. This would motivate to work even more. Moreover, different day care centers should co-operate even more with each other. Knowledge of European Framework should be applied from the perspective of individual child and their language development.

- *“There should be more co-operations between units and F2 kindergarten teachers to each district. Teachers should be given bonus salary when they have many F2 children in their group. This would bring more work motivation.”*
- *“Knowledge of European Framework should follow the perspective of children’s language development.”*

#### 8.1.6 Attitude

Finally, attitude emerged as a small sub-theme to be addressed. One teacher-respondent shared about the attitudes of the City of Espoo that they should allocate greater resources for F2 teaching. The city should invest more money on F2 teaching. This was expressed in the following:

- *“Attitudes of the city should be changed, when distributing budget money. Money investment could be increased.”*

### 8.2 Current challenges

‘Current challenges’ were expressed by the teacher-respondents is an important Meta-theme. Inasmuch as it reveals the obstacles, bottlenecks and root causes of unsuccessful day care services that existed at the time of the survey.

The sub-themes are listed below in the order that they appear in the Table 5 above.

#### 8.2.1 Mother tongue

Teachers expressed frustration about the diversity of mother tongues in the multicultural environment. There has been a huge influx of immigrants mainly to southern cities of Finland. Therefore, kindergarten teachers may be overwhelmed by this new reality in Finland. Perhaps true also as in the case in Espoo. They felt professional inadequacy to support so many different mother tongues represented in the children and their families in following qualitative data:

- *“We have only little opportunity to know about child’s own mother tongue and support for learning of mother tongue, if there is trouble.”*

- *“Supporting of own mother tongue, too many families still do not know/understand: how important role (knowledge and maintenance of one’s own mother tongue)....”*
- *“It is a challenge to respond to diverse objectives of the group in the middle of the busy everyday life and provide a rich language education.”*
- *“Challenge—language problems in everyday life are not solved even using pictures. Interpreters would be needed particularly in the beginning of the study year in order to support a child.”*
- *“Challenge: learning of new things is considered challenging and time-consuming. Big groups of children, not enough time for language learners.”*

The cited challenges above are real problems in that the teachers felt that interpreters were needed to facilitate language learning in the setting of so many different mother tongues, especially in the initial stages. The language learning becomes inefficient and ineffective with all the multicultural diversity and unique needs, thus compounding the challenges of F2 teaching.

#### 8.2.2 Communication with children

As expressed below, bigger is not better in F2 education. Intimacy and security within the group are lost. Group size determines the efficacy of language development. The smaller the group, the better the results due to factors cited below.

- *“Too little communication—operating in big groups.”*
- *“When planning group size needs of F2 children, language learning is not paid attention to (big group equals an adult has less time to be with one child.)”*
- *“Motivation a child to learning, if language causes difficulties for understanding.”*
- *“Big group sizes—so that a child does not receive so much time as is needed.”*
- *“Child is absent for a long time, for example, child’s being in his native country on vacation) or child’s shyness to speak Finnish.”*

In addition, shyness as a factor in larger groups is impediment to language learning. Long absences of children and families visiting their homeland have a deleterious effect on F2 instruction.

#### 8.2.3 Communication among staff

One teacher-respondent made the following observation about communication among staff members:

- *“Supporting adults of the group and inspiring (them) to language education. Transmitting your own enthusiasm towards ...patience in language teaching, paying attention to small progress and being happy of it.”*



To sum, motivation factors include inspiring others; transmitting enthusiasm; developing patience because of above cited challenges; and contentment on little successes with each child and group in this process. Obviously, open lines of communication are important when the teachers are teaching during playtime and before and after each day to maximize the results in the individual child's language acquisition and fluency.

#### 8.2.4 Communication with parents

Communication with parents by staff is fraught with its own perils as cited below:

- *“Introduction of different conceptions of learning and upbringing, softening of cultural and upbringing concepts” (culture of honor in Muslim cultures. Equal education and extreme religiousness.)*
- *“Understanding, finding cooperation, introducing the importance of own mother tongue and finding common language.”*
- *“Sometimes content of preschool education is not understood and there is questioning about for example, scarcity of work on tasks.”*
- *“Inability to read and write with different conceptions of learning.”*
- *“Different customs and habits.”*

Integration or lack of it by parents has a harmful effect how parents and teachers relate with each other potentially retarding their children's language development. The Finnish kindergarten teachers may not be well-equipped to handle cultural differences, although they are thrown into it. Nonetheless, the challenges of dealing with so many different countries and cultures may be overwhelming to staff and stressful when coping with the cultural barriers. These human exchanges may create cultural misunderstandings and potential conflicts.

#### 8.2.5 F2 teaching support

F2 teaching support has been criticized for a lack of financial commitment to achieve the F2 learning goals. As cited below, the additional funding should be sought in larger day care centers and for salaries required for optimal teaching results.

- *“F2 teaching is not supported. Should be seen in group size and salary.”*
- *“Matters can always be better with smaller groups et cetera, but after all, matters go well in this way.”*

To sum, efficacy in F2 learning is vastly improved by teaching in smaller groups. However, one must take into account the present day political realities in Espoo with the fiscally conservative management of the city which is at odds with this critique. For example, funds have been cut or denied for additional staff, thus the challenges of F2 teaching are exacerbated.

### 8.2.6 Ideas for development depicted

The analyses conducted in the above sections 7.1 and 7.2. produced 17 development ideas.

Overall teachers' ideas were combined into 8 groups themes, listed and explained shortly in the Table 6 below:

<b>Mother tongue</b> <ul style="list-style-type: none"> <li>Active engagement of parents to teach Finnish in conjunction with their mother tongue;</li> <li>The continuity and consistency of learning a mother tongue was emphasised;</li> <li>Formation of special groups based on mother tongue.</li> </ul>	<b>F2 learning / teaching</b> <ul style="list-style-type: none"> <li>The importance of continuous learning throughout the day enabling the conscious F2 learning. <i>"whole day is a F2 moment;"</i></li> <li>F2 teaching requires an effective environment tailored for individualised instruction;</li> <li>F2 training needs to be more customized to each child.</li> </ul>	<b>F2 methods</b> <ul style="list-style-type: none"> <li>Visibility and transparency teaching techniques helps parents to become part of F2 team;</li> <li>There should be additional resources and training about the methods.</li> </ul>	<b>Staff</b> <ul style="list-style-type: none"> <li>Shortage of teachers makes workload unreasonable (to correct imbalance more permanent and skilled F2 kindergarten teachers needs to employed, additional funding is needed);</li> <li>The hours per month for Itinerant special education kindergarten teachers should be increased;</li> </ul>
<b>Children's groups</b> <ul style="list-style-type: none"> <li>Emphasized was F2 teaching is at its best when children are in 'small and heterogeneous groups;'</li> <li>An individual child being placed in a group based on similar characteristics of language;</li> <li>Such placement enhances child mother tongue development alongside Finnish language strengthens a child's identity.</li> </ul>	<b>F2 Evaluations and observations</b> <ul style="list-style-type: none"> <li>Child assessment must be based on accurate observation for proper placement.</li> </ul>	<b>Resources</b> <ul style="list-style-type: none"> <li>Creating additional resources for training and methods that make every moment of the day an F2 moment;</li> <li>Utilization of F2 interpreters particularly at the beginning of the day care program.</li> </ul>	<b>Salary</b> <ul style="list-style-type: none"> <li>Selective salary increases and rewards for increased responsibilities such as larger F2 learning groups may improve motivation and results.</li> </ul>

Table 6. F2 kindergarten teachers (stakeholders) ideas for development are shown above. Data gathered by F2 kindergarten teachers from the questionnaire resulted in practical ideas for development.

### 8.3 Currently working with F2 methods

#### 8.3.1 Committed staff

In this section the teacher-respondents discussed about staff under the Meta-theme of ‘Currently working with F2 methods.’ The qualitative data below state some of these methods by name and the benefits achieved with the children. The list below represents what works in actuality in F2 class setting with all the challenges previously described.

- *“Many different methods are available. Support of itinerant special education teacher.”*
- *“Day care centers...where many F2 children are provided with an F2 kindergarten teacher as additional resource.”*
- *“Staff is enthusiastic and they take over the matters actively.”*
- *“Good planning and practical experience are really important in education planning.”*
- *“Planning, goal orientation, pleasure, commitment.”*
- *“Need to know that F2 teaching is essential part of our work.”*
- *“I see a child’s joy and awareness and the everyday life of the child becomes easier, when language skills improve.”*
- *“Committed adults, conscious and language education and commitment to it, internalization of the thought that the entire day care day is language education, good mother tongue of both children and their parents.”*
- *“Mapping of language skills, searching of immediate goals, supporting language development of the group.”*
- *“Child’s favorable moment may happen at any time that is why it is important that staff see itself also as language educator and day care as a moment of language learning. This way every child would get teaching as their favorable moment.”*

In conclusion, success is weight by an individual child’s joy of language attainment. This energizes the child and the staff. The staff are committed taking F2 teaching seriously and enthusiastically. This galvanizes the staff commitment to excellence of teaching and maintains motivation despite obstacles.

#### 8.3.2 Teaching and play

In day care a playtime is essential and reinforces learning. According to Halme and Vataja (2011, 25), play like situations bring out the best results for children in teaching of linguistic skills. Below is one citation by teacher-respondents about how important play is in the development of language learning. As Pollari and Koppinen state, a child’s linguistic orientation will be disrupted if there is a continual uproar and many sources of sounds around simultaneously in the environment (Pollari and Koppinen, 2011, 130). Additionally, peaceful environ-

ment is emphasized where children decompress from class activities and practice with children and staff their language skills in a less stressful manner.

- *“Safe atmosphere in smaller groups is preferred.”*
- *“Anywhere—outdoors admiring a snail’s slimy traces, in a library reflecting about library rule, going out naming clothes, by the dinner table discussing food etc.”*
- *“In familiar a peaceful and environment.”*

In conclusion, the quotations above regarding play, its settings and playtime highlight the importance of play in F2 instruction.

### 8.3.3 ECEC plan and Pienten kielireppu

Educational support for children in the F2 setting included the following observations regarding the Pienten kielireppu and group ECEC plan. These are self-explanatory:

- *“Every group can get help from consulting F2 kindergarten teacher. In our day care center there is no separate F2 kindergarten teacher, but there are kindergarten teachers and F2 kindergarten teachers, which help group kindergarten teachers by consultations. There is a possibility to get consultation, training, study circles, pictures, materials, help for discussions, to tell on parents’ evenings about mother tongue support et cetera.”*
- *“In my opinion, it is good that F2 thinking has extended and has happened—a shift to an understanding that the whole day and not only of separate moments—is important from the perspective of F2 education. In recent year, the groups have encountered big changes, in the past the ‘cleaning ladies’ were available for assistance, but now one can only get assistance rarely. If you want to make groups sizes smaller, it has been made much more difficult. At the same time multiculturalism has been hugely increased et cetera. These may feel as difficult changes from the group’s perspective, but I am glad to notice, that F2 knowledge and its becoming part of everyday life has also clearly increased in different parts of our district. Also, in my opinion, the model of thinking that a child’s immediate objectives are placed in a group’s ECEC plan as concrete entries. It works well and makes F2 teaching more goal-oriented and visible.”*
- *“With the help of “Pienten kielireppu” the level of a child’s language skills may be found. Through that for child own objectives for language learning.”*
- *“Pienten kielireppu” is great material and people start to know how to use it. An ideal situation has been reached when everybody in the group knows how to use it. It will be used for every child speaking any other language than Finnish. Immediate objectives found from it will be taken to the group ECEC plan which will be seen in the group’s everyday life. Then we will reach a situation in which I will be pleased. In some groups it has been done already, some groups are still on their way there.”*

To sum, the significance of F2 education is that the entire day is an F2 moment whether the child is in the classroom, playground, in a potty time et cetera. In other words, every aspect of child's life is a learning moment for the F2 educator.

#### 8.3.4 Evaluations

Below are the teachers' evaluations on how the current F2 educational system works using 1 to 5 Likert scale yielded quantitative data. The data shows current system is working well and fairly well. One out of three voted fairly well, and one out of three voted well.

How well the current F2 educational system is working in Espoo Finnish speaking day-care centers?

Badly	Satisfactorily	Fairly well	Well	Very well	No answer
			(2)		(1)

How well the current F2 educational system is working in your day-care center?

Badly	Satisfactorily	Fairly well	Well	Very well	No answer
		(1)	(1)		(1)

How much does the city of Espoo support kindergarten teachers in day-care centers?

Badly	Satisfactorily	Fairly well	Well	Very well	No answer
		(1)	(1)		(1)

Table 7. Respondents' answers based on the following Likert scale: (1) Badly, (2) Satisfactorily, (3) Fairly well, (4) Well, (5) Very Well, (6) No answer are depicted above.

## 9 Findings from expert interview

An expert interview was carried out in order to find out the applicability of service design as a methodology in the public sector, and especially in seeking to improve F2 services in the day care centers. The face-to-face interview was conducted in English in October 2014. The interviewee was provided with structured themed questions related to public F2 teaching and services before the interview.

Juha Kronqvist, a Service Designer in the Helsinki area, allowed one of the authors to interview him with open-ended questions. Please see expert interview questions in Appendix 3. According to Kronqvist, the structures of public sector support the "*mind-set of a faraway power and authority relationship over people.*" Service mind-set means working together with customers/clients or citizens in a way that views them as a "*resource*" in the production

of services. In practice, this means including them in the planning, designing and testing stages of services. However, Kronqvist agrees that it can be challenging to switch from the power/authority mind-set to a service mind-set even when the current mind-set is *“causing much inefficiency”* and is costly. Service design offers tools to reach collaboration with people *“reaching the gap between the organization and the user of services”* and allows testing their ideas in early stages of service production process.

Presently, service design methods are being introduced in the public sector. However, besides the security seeking mind-set there is a lack of know-how on how to apply the service design approach in practice. Especially, this is true in the public sector because its structures are restrictive to employ service design techniques. Kronqvist asserts, that *“it is mostly because of the mind-set rather than skills and understanding.”* He argues that public sector needs to realize that the change is required in the public sector because *“it is running and heading itself for the wall.”* By applying and spending resources on service design, the wellbeing of citizens and customer satisfaction are being ultimately improved with increased savings.

Kronqvist advises that it is important to find a *“sponsor”* who can coach an employee interested in applying service design approaches in their working place. His agency has begun to *“incorporate approaches from change management, organizational studies, process engineering and building methods”* while mentoring the organizations into big changes.

In the area of F2 learning, Kronqvist mentioned successful application of service design in the public sector, a Mind-Lab study from Denmark. It is a governmental unit applying service design methodologies. In their studies they noticed that the educational services for children of foreign background were inadequate. Poor language skills caused them to *“fall behind”* in a society even though they were otherwise smart and normal children. The problem was also that their parents did not master Danish at home either. After studying the issues, Mind-Lab created a learning toolbox for families to practice Danish language at their homes. As a consequence, their learning difficulties decreased significantly.

Moreover, when applying service design mind-set in the area of F2 learning it is important to understand the most important stakeholders, such as children and their parents. It is also essential to form a holistic view what kind of services are available for them; how these F2 related services work at the moment; and what are the root problems both their causes. Here it is beneficial to possess a design mind-set that means the holistic view a person approaches problems and engages in a continuous and iterative framing and reframing process.

When approaching and engaging passive and quiet people in developing F2 services it is first important to create *“a safe strategy”* how to do that appropriately and respect their cultural

boundaries. In the field of F2 services this entails talking for example with people who know them, such as language teachers and day care workers and people who help them with immigration issues. In the meantime, it is helpful to formulate the research in a positive way such as *“we invite people to join our design process”* and *“we are trying to improve the services that are offered to you.”* Another way is to go places where these people hang out and talk to them. Lastly, Kronqvist stated that people are usually very motivated to participate in sharing their experiences and ideas how to improve services.

## 10 Discussion and conclusions

Presently, due to growing numbers of new arrivals, early childhood education professionals of Espoo are facing pressing task of supporting integration of a large influx of foreign background children into the Finnish society and providing them with appropriate F2 instruction. The main objectives of this study using service design techniques were to find out how F2 services work in Espoo and what kind of bottlenecks and challenges occurred in the provision of these services. Furthermore, the aim was to discover ideas for developments in F2 services to benefit both the teachers and multicultural families. Lastly, discovering the realities of applying service techniques in the public sector, especially in F2 services were examined.

The key concepts of the thesis were Finnish as a second language acquisition, service design and learning a second language. The covered theories comprised of Finnish as second language teaching, bilingualism, ECEC partnership, design thinking and service design.

The following methods and techniques were applied: directed storytelling, questionnaire sent and received by e-mail, expert interview, customer experience mapping, affinity analysis and diagram and thematic analysis.

Utilization of service design techniques turned out to be a useful method in the quest to understand the existing level of service experienced with an eye to improve F2 ECEC services. Through respondents' experiences, we were able to find out end-users (parents) and stakeholders (F2 teachers) concerns, needs, bottlenecks to delivery of F2 services and development ideas to improve the existing F2 services. These should lead to ideas for developments to F2 instruction to benefit both the teachers and multicultural families to improve F2 fluency thus improving overall integration into Finnish society.

The collection of data was taken in the fall of 2014 and must be viewed within the socio-economic-political context within the municipality of Espoo. Therefore, some of the problematic issues discussed by respondents must be viewed within the context of migrating families

coming from around the world to integrate in Finland as well as the existing budgetary constraints during an economic downturn. This means for the F2 teachers working smarter that is doing more with less; not an easy task. How can they improve F2 teaching in this context? How can the parents of the children receiving F2 language instruction work smarter to augment F2 learning given their diverse mother tongues? Will the City of Espoo improve their F2 services with the end-user information provided?

The authors analyzed and interpreted the data provided by parents and teachers in this evaluation of F2 instruction. However, the authors were careful to not express their own opinions on how to improve the service, but let the findings speak for themselves. Instead the recipients of the service that is the children and their families, as well as the service providers the F2 ECEC teachers, were given a voice and thus, were empowered.

Below are the research restated:

1. What are foreign background parents' needs, experiences, concerns and ideas for development in F2 teaching (on behalf of their children) as the end-users?
2. What are F2 ECEC professionals' needs, experiences, challenges and ideas for development in F2 instruction as the stakeholders?
  - b. What are the realities of applying service design methods in the public sector, especially from the perspective of a service design expert?

Storytelling, a service design technique, applied with five parents allowed for trust building based on anonymity. First, directed storytelling data was analyzed and grouped by affinity diagrams into themes and sub-themes. This method proved useful and powerful highlighting numerous bottlenecks in the delivery of F2 instruction service. Data collected from ECEC professionals and service design expert were analyzed using thematic analysis. This method also showed various bottlenecks in the existing F2 instruction services.

Service design expert, Kronquist referred to a successful Danish Mind-Lab study where a learning toolbox for foreign background families were developed utilizing service design approach. There may be a similar need in Finland for finding adequate solutions such as the language tool kit for F2 instruction in ECEC setting. However, this may require the necessary funding by a Finnish Ministry or by a motivated municipality to do additional research on a broader scale and engaging many different language groups on the language tree to sufficiently represent the multicultural diversity of families in a globalized world. Difficulties with learning Danish were acknowledged in Denmark. The children were beginning their school with inadequate Danish language skills. In other words, Danish as a second language was severely lacking after their graduation from day-care. The issue was resolved by supporting the



child's family and the child's Danish language skills development before starting a regular school. (Mind-Lab 2013, 27).

The value for the residents in the municipality is based on functional municipal services and service solutions facilitating their lives. A public sector is also responsible to deliver value to their customers as well as companies are to create a value and valuable experiences to their customers both produce profit from their operations (Jumisko, Jänkälä, Piekkari & Turulin 2013, 33).

There are many benefits by listening to service users. By utilizing service design methods, it is possible to find service users' hidden and unconscious needs which can be the starting points for the development of existing services or design of new services. According to Jäppinen and Sallinen, by applying user-centered approach the quality of the services and job satisfaction can be enhanced. Moreover, the trust to political and administrative actions can be increased. This approach has also positive effects on service users' "quality of life, the experience of citizenship and democracy." (Jäppinen & Sallinen 2012, 17).

Consensus found among F2 professionals and parents	
Unranked in terms of their overall significance on the topic	
•	More linguistically skilled educators are needed, resources for educators should be increased;
•	Children's groups are too big; groups should be smaller, heterogeneous, children should be of similar age and possess similar language characteristics;
•	Mother tongue should be supported more;
•	New F2 methods should be applied and invented;
•	Support for communication between F2 children and staff is needed when children start day care: translators, foreign background staff;

Table 8. Consensus is depicted above about bottlenecks and solutions to them regarding F2 services.

The above points represent the significance of the findings but they are not merely restated. Apparently, the first point reflects a bottleneck in F2 service. The need is for additional hiring and the realities are budget constraints. The more frequent the encounters are with F2 teacher the more F2 learning is enhanced. Conversely, when a child is placed in a larger groups, F2 kindergarten teacher has less time per child. Thus, the quality of communication and F2 instruction suffers. Smaller groups were assumed to enhance children's learning. Smaller groups provide more F2 attention perceived to be in a safer learning environment. Thus, small group children's motivation is enhanced. As Baker and Jones (1998, 651-652) state, there is direct correlation between learner's motivation and the degree of success in the second language acquisition. Therefore, better F2 results may be achieved, when children

are placed in small heterogeneous groups with children of similar age and linguistic characteristics. However, this would significantly add to educational cost requiring the hiring of additional F2 teachers.

Both groups of respondents also agreed that mother tongue should be supported more. In fact, mother tongue learning was regarded as more beneficial to both parents and child alike. For example, the parents using mother tongue in the home setting reinforce F2 teaching in day care classes. However, this received little support from day care center staff. On the contrary, ECEC professionals understand the use of mother tongue as a tool beneficial for strengthening foreign background children's identity. Nurmilaakso and Välimäki (2011, 87-88) assert that mother tongue is critically important for F2 learning.

Lastly, a need exists for communication support between F2 children and staff especially at the beginning of the day-care cycle (translation and utilizing foreign background staff). For instance, foreign background workers are logical hiring choices to support mother tongue learning, if they speak Finnish fluently with proper diction. Because of the diversity of mother tongues, cost may be prohibitive to implement this fully. Thus, the majority of early childhood education teachers should be Finnish native speakers. The F2 kindergarten teachers understand this dilemma and strongly recommended that foreign background parents should be active partners in their children's mother tongue, strengthening their F2 learning.

Our study has demonstrated that F2 instruction methods are not sufficient. In fact, using pictures is insufficient to develop fluency. Our research has indicated that there needs to be language based games developed for F2 learning. F2 kindergarten teachers admitted that additional training is required including increasing the funding to allow itinerant F2 kindergarten teacher to come weekly instead of bi-monthly. In conclusion, moment-by-moment F2 learning was emphasized for the duration of child's day.

<b>Parents' list of issues currently working well in ECEC of Espoo</b> Unranked in terms of their overall significance on the topic	
▪	Small group day care (for example family group day care) is beneficial for F2 development, since there is more time per child;
▪	Integration group is beneficial for F2 development, since there is more time per child;
▪	Good cooperation between parents and day care;
▪	When there are many Finnish children in the group, it is better for F2 development;
▪	Experienced educators with positive attitudes;
▪	F2 methods used in day care centers now (visual methods, morning circles et cetera);

▪ Therapy services available for special needs children (especially speech therapy is working well);
▪ Child's successes in communication with other children.

Table 9. Parents' list of things that work well is depicted above.

Our study was a small scale formative evaluation which aimed to find out, what worked well in F2 instruction in ECEC of Espoo and what did not, and generate ideas for development. First, the authors examined parents' and early childhood educator respondents' views on what work well in the F2 instruction system.

New arrival parent-respondents had very opposite experiences with ECEC system and consequently their opinions varied considerably on the same topics. Therefore, the parents' views are generalized. In general, eight topics were found concerning issues currently working well, see table 9 above. Parents asserted that day care with small groups provided children with more educators' attention, thus F2 learning is enhanced. Integration group was assumed to be favorable for children's F2 development. Parents had highly positive views about different day care centers. Other types of day care groups were mentioned, such as family group day care, especially when these groups provided their children with more attention from F2 educators.

Additionally, F2 instruction methods (visual, morning circle, et cetera) currently used, were admitted to work quite well. Parents stated that good communication within children group supports children's language development. Also, parents claimed that Finnish speaking children in a children's group increases foreign background children's chances to acquire F2 skills.

Therapy services available for special education children received mixed responses, because some worked well and others did not. Speech therapy is considered working well and useful for F2 development. To sum, the authors agree that specialized services for special education children enhances children's language development as well.

Finally, parents expressed positive views on experienced educators with positive attitudes. Many of our respondents informed us about their positive experiences with educational cooperation between parents and day care staff and its beneficial impact on F2 learning.

F2 professionals' list of issues currently working well in ECEC of Espoo	
Unranked in terms of their overall significance on the topic	
▪	Many of currently used F2 methods are effective, Pienten kielireppu evaluation tool is very useful;
▪	Shift has happened in educators' way of thinking, nowadays the whole day is as a possibility for F2 instruction, that the whole day is a F2 moment;
▪	System of planning and setting concrete goals was admitted to work well (ECEC plan for a child, a group);

▪ Day care staff has certain support available: support of F2 itinerant kindergarten teachers, consultations, materials and trainings;
▪ Enthusiastic staff.

Table 10. F2 Professionals' list of things that work well is depicted above.

ECEC professionals also admitted several points that work well presently. First, they stated several effective F2 methods are available. Especially, Pienten kielireppu tool received accolades, used for children's language skills evaluation.

Additionally, planning processes involving setting clear F2 goals was admitted to be working well in Espoo day cares (plans for a child, a group ...et cetera). Some of ECEC professionals assumed that current support for day care staff works well in terms of availability of F2 teaching materials, training, consultations from F2 itinerant kindergarten teachers and day care staff—they have possibilities for assistance and professional knowledge, if necessary.

Lastly, respondents claimed a positive shift occurs in ECEC educators' way of thinking, when they see the whole day as a F2 moment, suitable for F2 instruction. This shift was assumed to influence positively on the process of F2 instruction with staff. Enthusiastic members of staff received positive responses from teacher-respondents. To sum, the real question is how to build staff morale with innovative ideas that improve F2 learning, enthusiasm is likely to be a by-product.

<b>Parents voiced their concerns- potential bottlenecks to F2 services</b> Unranked in terms of their overall significance on the topic.	
▪ Children's language background in the ECEC not always taken into account;	
▪ Delayed child placement into integration group was complained about, because children were first introduced to a larger group with older age children thus impeding their language learning;	
▪ Child placement into too large groups with widely differing ages is deleterious F2 development;	
▪ Lack of communication between day care staff and children, as a result of kindergarten teachers who do not possess mother tongue knowledge of the children per class;	
▪ Teachers lacked intercultural competence skills which impaired communication between parents and teachers; generally Finns lack cultural sensitivity;	
▪ Perhaps the biggest complaint of all: the language group sizes were too large thwarting the efficacy of language development;	
▪ The lack of skilled F2 kindergarten teachers delays or retards language integration;	
▪ Itinerant special education kindergarten teachers' visits are too infrequent, once or twice a month. This does not provide appropriate and reliable assessment of child's skills;	
▪ The lack of F2 methods is disturbing to new arrival parents and children of new arrivals;	
▪ Children's mother tongue receives little or no support from the day care center.	

Table 11. Data revealed bottlenecks to F2 services from parents' (end-users) point of view are listed above.

The above list of bottlenecks has been discovered based on the outcomes from the research. For instance, it demonstrates that the F2 service delivery system can be further improved and innovated by novel development ideas. According to Halme and Vataja, F2 methods should be selected in accordance to child's language level, age, interests and cultural background. Furthermore, in larger groups the background noise may cause the child to hear the words in a wrong way. (Halme and Vataja 2011, 26)

<b>Teachers revealed present bottlenecks to deliver F2 services</b> <b>Unranked in terms of their overall significance on the topic</b>	
▪	Difficulties with communication between day care staff and foreign background children in the beginning of the new day care year resulting from lack of interpreters;
▪	The lack of knowledge and understanding, finding co-operation and common language with parents and support for children's mother tongue hinders language acquisition;
▪	Some teachers lack motivation to inspire others: lacking in praise for small successes in a child's learning and enthusiasm;
▪	The lack of municipal funding impedes greater success in achieving F2 goals;
▪	Shortage of teachers makes the workload unreasonable.
▪	Too big children groups were complained to impede quality communication between children and day care staff and thus children's F2 learning.

Table 12. Bottlenecks discovered in F2 services from F2 kindergarten teachers' perspective are listed above.

In the above table, a major bottleneck discovered is a result of increased multiculturalism. F2 kindergarten teachers report feelings of frustration because of the diversity of mother tongues normally seen in most day cares in Southern Finland. This may be obvious, but F2 kindergarten teachers must improve children's mother tongue skill-sets, if at all possible. This may require additional study or a Finnish toolkit based on mother tongues to augment learning.

The ideas for development were investigated, yielding 17 separate ideas for development from data with teacher-respondents. In short, F2 kindergarten teachers admit the need for properly educated F2 kindergarten teachers. The City of Espoo must commit funds to add more resources for F2 training targeted towards the new arrivals. Increased frequency of F2 teaching with smaller groups enhances F2 learning. For example, F2 instructors could come four times a month instead of once or twice a month, or if funding permits each group could have a permanent F2 kindergarten teacher. Because of the work overload, one F2 kindergarten teacher thought that there should be two permanent kindergarten teachers per group.

How will the City of Espoo rank these ideas for implementation without the cost-benefit analysis study? Furthermore, our study indicates that more methods should be included in repertoire, including further study by the Espoo or Ministry of education in Finland to include a Finnish customized toolkit similar to the Danish toolkit.

Other ideas were expressed by teacher-respondents, worthy of merit: increased financial incentives for increased F2 responsibilities; utilization of F2 interpreters particularly at the beginning of the day care; formation by mother tongue of special groups whenever possible and increased program funding may well be required by the city. Each developmental idea must be weighed for efficacy in F2 learning by both municipalities and Finland. There is a working assumption that when meritorious development ideas are adopted and funded there will be increased fluency at an earlier age and this will assist smooth the way for successful integration. According to Pollari and Koppinen, every marginalized young person will cost about 1.2 million to the society. 8,000 more school dropouts per age group are relatively costly, if there are already about 50,000 marginalized in society. (Pollari & Koppinen 2011, 31).

Data provided by parent-respondents from the directed storytelling sessions resulted in practical 15 ideas for development. Parents proposed the idea of special education teacher, who would constantly work in the same day care center in order to adequately evaluate children and their language skills. Parents desire that the ECEC professionals closely working with F2 learn 'real world skills' on how to teach F2 to foreigners. Teachers should be sensitive to children's cultural identity. According to Halme and Vataja, how peers view each other is extremely important in their language groups. Negative feedback can damage child's self-worth. Every child has to be treated with dignity in an equalitarian way. (Halme & Vataja 2011, 12).

Intercultural competence and the impact of emotions were not mentioned in the data even they are an important factors in meeting new arrivals. An intercultural qualified teacher aims to support CNA's integration to be part of Finnish language and cultural community as well as part of their own language and cultural community. Intercultural competence consist of multicultural skills, for example the desire and the ability to feel and appreciate their own and other cultural heritage and view of life. An intercultural sensitive person knows the special features of cultures and languages; has emotional intelligence; and the ability to identify emotional reactions caused by different cultures. They are and want to be interested in their own and other cultures both possess competence to make choices and solutions that are not based on prejudice. An intercultural sensitive teacher has also the motivation and courage to collaborate with people from other cultures. (Pollari & Koppinen, 2011, 73).

As discussed in analysis section, customer experience mapping reveals the power of human emotional reactions, in this case, the reactions of the end-users, parent-respondents. Impacts

to emotions were not mentioned in the data; even it is an important factor when meeting new arrivals. It is Important to build positive emotional atmosphere with new arrivals, both children and parents. As Pollari and Koppinen argue, If the objective is to graft F2 student into her new school environment and the people, it is invaluable to take into account the emotions and feelings of all parties in all planning. Emotions build both negative and positive relationship with the people, culture and the environment. In essence, emotions reveal our relationship with issues and people. It is very important to build and maintain a positive atmosphere which is unimpeded. In Finland, you cannot ignore that human beings always react with their feelings and emotions. The motivation to learn a new language is influenced by feelings. Emotions are largely based on feelings. Feelings can become a real challenge for real encountering of F2 students and their families. (Pollari & Koppinen, 2011, 28-29).

#### 10.1 Areas for future research

Future research should be conducted to investigate F2 services mainly in Southern Finland and where there is high concentration of new arrivals. This should be done at a sufficient scale, to provide the decision-makers with qualitative and quantitative data, based on larger sampling pools.

This may support the use of a Danish toolkit for Finnish implementation. However, the Finnish tool kit may need to be customized for Finland in as much the country is bilingual, Finnish and Swedish. Lastly, we believe in the applicability of using service design methods to research bottlenecks in public service entities including the delivery of social services.

#### 10.2 Authors criticism of work

The authors study is novel in its approach to research using service design to discern and understand the bottlenecks and challenges to F2 language instruction. Due to lack of time and funding, the respondent groups were by necessity small providing relatively small amount of ideas for development. Despite this, the study generated voluminous amount of qualitative data to be analyzed and interpreted. We felt that we were pioneers. We were grateful for all the comments by readers. The reason is simple, service design is a new methodology that includes over 250 distinct methodologies. It is now being applied in social work systems to uncover users needs to find bottlenecks, challenges and to find ideas for development for sustainability.

Another criticism is that perhaps we should have interviewed children for their experiences for what works and does not work in F2 instruction both what kind of ideas for development they would have come up with. The authors feel that the study would have been enhanced by quantitative statistical data based on sufficient numbers of respondents reducing sampling error.

### 10.3 Implications for Finnish Society

In light of the current economic realities, implementation of development ideas must be carefully weighed to achieve optimum results. The key criteria for increased funding must be sustainable and to achieve results—increased fluency for day-care children. This may save municipalities and Finland in the long run. The authors recommend further study for funded research using service design methods to investigate the development of a ‘Finnish toolkit’ that proved successful in Denmark.

In conclusion, the goal is to improve Finnish society through the ongoing evaluation and improvement of F2 services for day-care children. This can be accomplished by applying design thinking. It is our hope that this paper stimulates debate and discussion on how to improve F2 instruction in Finland and to promote more successful integrations for all. Assuming things are improved in an upward manner for F2 instruction, the authors hope the quest for children of new arrivals and their families is a smooth one and less arduous.



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## Appendices

### Appendix 1 -ECEC Curriculum of the City of Espoo and National Curriculum Guidelines on ECEC

ECEC Curriculum of the City of Espoo (Italics are verbatim quotes)	
✓	Based on the National Curriculum Guidelines on ECEC in Finland.
✓	Main values are (City of Espoo 2013, 11). <ul style="list-style-type: none"><li>○ <i>Client-centeredness;</i></li><li>○ <i>Innovativeness;</i></li><li>○ <i>Openness;</i></li><li>○ <i>Fairness of actions;</i></li><li>○ <i>Sustainable development.</i></li></ul>
✓	Main goal of ECEC is <i>child's overall well-being</i> in Espoo (City of Espoo 2013, 11).
✓	The goal of multicultural early childhood education is to raise (City of Espoo 2013, 46). <ul style="list-style-type: none"><li>○ <i>Inter-cultural understanding;</i></li><li>○ <i>Fairness;</i></li><li>○ <i>Equality and language and culture awareness and that refers to all children in ECEC.</i></li></ul>
✓	Well implemented language upbringing and multicultural nurturing support the integration process of children with different languages and culture background into Finnish society. (City of Espoo 2013, 46).

National Curriculum Guidelines on ECEC (Italics are verbatim quotes)	
✓	National Curriculum Guidelines on ECEC are aimed to provide a framework and general guidelines regulating their content and quality of ECEC activities in Finland;
✓	Each municipality or a group of cooperating municipalities should create their own ECEC curriculum (STAKES 2004, 9-10)
✓	Overall principles (STAKES 2004, 13): <ul style="list-style-type: none"><li>○ <i>Non-discrimination and equal treatment;</i></li><li>○ <i>The child's best interest;</i></li></ul>

<ul style="list-style-type: none"> <li>○ <i>The child's right to life and full development;</i></li> <li>○ <i>Giving due weight to the views of the child.</i></li> </ul>
<ul style="list-style-type: none"> <li>✓ The child has right to (STAKES 2004, 13): <ul style="list-style-type: none"> <li>○ <i>Warm personal relationships;</i></li> <li>○ <i>Secured growth, development and learning;</i></li> <li>○ <i>Secure, health environment that allows play and a wide range of activities;</i></li> <li>○ <i>Receive understanding and have their say in accordance with their age and maturity;</i></li> <li>○ <i>Receive special support they need;</i></li> <li>○ <i>Their own culture, language, religion and beliefs.</i></li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>✓ Three educational goals (STAKES 2004, 13): <ul style="list-style-type: none"> <li>○ <i>Promotion of personal well-being;</i></li> <li>○ <i>Reinforcement of considerate behavior and actions towards others;</i></li> <li>○ <i>Gradual build-up of autonomy.</i></li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>✓ Educators role (STAKES 2004, 16): <ul style="list-style-type: none"> <li>○ <i>Are aware of their educator role, values and ethical principles;</i></li> <li>○ <i>Analyze and assess their own work;</i></li> <li>○ <i>Maintain and develop their professional skills and knowledge;</i></li> <li>○ <i>As a community documents, evaluates and makes efforts to continuously develop their work;</i></li> <li>○ <i>They need to be committed, sensitive, able to react the child's feelings and needs;</i></li> <li>○ <i>Enable good atmosphere;</i></li> <li>○ <i>Foster continuity of the child's friendships, care and education relationships;</i></li> <li>○ <i>Plan activities and build an environment which takes account of children's most typical ways of action and six content orientations;</i></li> <li>○ <i>Are aware of child's potential for growth and learning;</i></li> <li>○ <i>Encourage and support children to act independently;</i></li> <li>○ <i>Transmit earlier generations' experiences, cultural heritage and scientific knowledge,</i></li> <li>○ <i>Respect children's, parent's and one another's experiences and views;</i></li> <li>○ <i>Base their work on the principles of ECEC partnership.</i></li> </ul> </li> </ul>

✓ Content orientations are (STAKES 2004, 24):

- *Mathematical orientation;*
- *Natural sciences orientation;*
- *Historical-societal orientation;*
- *Aesthetic orientation;*
- *Ethical orientation;*
- *Religious-philosophical orientation.*

✓ ECEC partnership (STAKES 2004, 28):

- *A conscious commitment by parents and staff to collaboration for supporting children's growth, development and learning,*
- *Is built on the child's needs, the realization of the child's best interests and rights being the guiding principle in all ECEC activities.*

## Appendix 2 - Questions to foreign background parents

1. Tell us, where are you and your spouse from?
2. Tell us, what is your and your spouse's mother tongue(s)?
3. Tell us, what language(s) do you use at home?
4. Tell us, how would you describe your own and your spouse's Finnish language skills?
5. How old is/are your child(ren)?
6. How long she and/or he been in a Finnish language day care center?
7. Does your child(ren) attend day care center now (or are they older)?
8. Tell us, how would you describe your child's Finnish language skills before she and/or he has entered Finnish language day care center?
9. Tell us, how would you describe your child's Finnish language skills now?
10. Tell us from your point of view and experiences, what factors have helped your child to develop his/her Finnish language skills? (Tell us by whom, when, where, how?)
11. Tell us from your point of view and based on your experiences, what factors have impeded your child from developing his/her Finnish language skills? (Tell us by whom, when, where, how?)
12. Tell us, how would you describe your experiences of communication between you and the staff in the day care?
13. Tell us, how would you describe your experiences of communication between you and other parents in the same day care?
14. Tell us, how have your child(ren) experienced day care environment and the communication between teachers and other children?
15. Tell us, how does/has the day care meet/met the educational needs of your child from your point of view? Please explain your answer.
16. Tell us, how the development of your child's Finnish language skills are/were supported in the day care?
17. Tell us, how the development of the mother tongue of your child is/was supported in the day care?
18. Tell us, what is organized well and what requires more development in the system of Finnish as a second language teaching of your day care center?

### Appendix 3 - Questions to a service design expert

1. How could Finnish public sector, especially the City of Espoo and its F2 early childhood education teaching services benefit from service design? What are the most important benefits?
2. What are the biggest challenges you have faced in using service design in the Finnish public sector in the field of education or other?
3. How do you especially overcome the bureaucratic mindset in Finland?
4. What kind of advice would you give to public sector workers who are interested in applying service design to public services in Finland?
5. What are your most favorite methodologies of service design for the Finnish public sector?
6. What would be the most effective service design strategies to reach the passive or 'quiet' people groups, especially foreign background families in a Finnish community such as City of Espoo?
7. What service design techniques or methods would you use to ascertain the needs of foreign background parents and children with Finnish as a second language?
8. What is the outlook for the next several years for service design graduates in Finland? What are likely salary ranges for the best studentgraduates?
9. Would you like to add anything else?

## Appendix 4 - Questionnaire to F2 ECEC professionals

### Kysely Espoon kaupungin S2 lastentarhanopettajille

Sosionomi opiskelijoiden  
Polina Poletaevan and Eila Ryyänen-McEwanin  
opinäytetyötutkimusta varten,

*Teaching of Finnish as second language in Early Childhood Education of Espoo: experiences, needs and ideas for future development from parents, kindergarten teachers and service design experts*

Laurea AMK, syksy 2014



### 1. Perustiedot

Kysymykset	Vastaukset
1. Missä työskentelet S2 lastentarhanopettajana?	
2. Kuinka kauan olet työskennellyt S2 lastentarhanopettajana (S2 opetusalan työkokemuksen pituus)?	
3. Kuinka paljon sinun päiväkotiryhmässäsi on lapsia, joiden äidinkieli ei ole Suomi?	
4. Kuinka paljon sinun päiväkotiryhmässäsi on lapsia, joiden äidinkieli on Suomi?	

### 2. Nykyinen tilanne -1

Kysymykset	Vastaukset
1. Miten voisit kuvailla oman päiväkotiryhmäsi ulkomaalaistaustaisten lasten S2 kykyjen tasoa?	Ole hyvä ja alleiviivaa yksi numero, joka kuvaa parhaiten näiden lasten S2 kykyjä: 1 = (huono), 2 = (kohtuullinen), 3 = (keskinkertainen), 4 = (hyvä) and 5 = (erittäin hyvä). Ole hyvä ja selitä vastauksesi:
2. Minkälaiset positiiviset tekijät ovat auttaneet ulkomaalaistaustaisia lapsia saavuttamaan hyviä tuloksia omassa päiväkotiryhmässäsi?	
3. Minkälaiset negatiiviset tekijät ovat estäneet ulkomaalaistaustaisia lapsia saavuttamaan parempia tuloksia omassa päiväkotiryhmässäsi?	

### 2. Nykyinen tilanne -2

Kysymykset	Vastaukset
4. Mitkä ovat monikulttuuristen lapsiryhmien hyödyt ja haasteet?	
5. Onko eri taustaisilla lapsilla käyttäytymiseroja? Auttavatko ne lastentarhanopettajien työtekoa tai tekevätkö sen haastellisemmaksi?	
6. Tämä on helppoa minulle kommunikoidessani ulkomaalaistaustaisten vanhempien kanssa ... (ole hyvä ja tarkenna)	
7. Tämä on vaikeaa/haastavaa minulle kun kommunikoidessani ulkomaalaistaustaisten vanhempien kanssa ... (ole hyvä ja tarkenna)	
8. Onko S2 opetuksessa ja kommunikoinnissa ulkomaalaistaustaisten vanhempien kanssa muita haasteita kuin kielimuuri?	

### 2. Nykyinen tilanne -3

Kysymykset	Vastaukset
9. Tämä on helppoa minulle S2 opetuksessa, ... (ole hyvä ja tarkenna)	
10. Tämä on vaikeaa/haasteellista minulle S2 opetuksessa ... (ole hyvä ja tarkenna)	
11. Tämä huolestuttaa minua S2 opetuksessa ... (ole hyvä ja tarkenna)	
12. Arvostan tätä asiaa S2 opetuksessa... (ole hyvä ja tarkenna)	

### 2. Nykyinen tilanne -4

Kysymykset	Vastaukset
13. Kuinka hyvin nykyinen S2 opetussysteemi mielestäsi toimii Espoon kaupungin suomenkielisissä päiväkodeissa?	Ole hyvä ja alleiviivaa yksi numero, joka kuvaa parhaiten S2 opetussysteemin toiminnan Espoon päiväkodeissa: 1 = (huonosti), 2 = (kohtuullisesti), 3 = (keskinkertaisesti), 4 = (hyvin) and 5 = (erittäin hyvin). Ole hyvä ja selitä vastauksesi:
14. Kuinka hyvin nykyinen S2 opetussysteemi mielestäsi toimii päiväkodeissa?	Ole hyvä ja alleiviivaa yksi numero, joka kuvaa parhaiten S2 opetussysteemin toiminnan päiväkodeissa: 1 = (huonosti), 2 = (kohtuullisesti), 3 = (keskinkertaisesti), 4 = (hyvin) and 5 = (erittäin hyvin). Ole hyvä ja selitä vastauksesi:



#### 4. Ehdotuksia S2 opetuksen parantamiseksi

	Kysymykset	Vastaukset
1.	Miten voisit kuvailla täydellistä S2 opetussysteemiä	
2.	Mielestäni tämä toimii hyvin Espoon nykyisessä S2 opetussysteemissä ...	
3.	Mielestäni tämä puuttuu Espoon nykyisestä S2 opetussysteemistä...	
4.	Mitä mielestäsi pitäisi muuttaa /muuttaa täydellisen S2 opetussysteemin saavuttamiseksi?	
5.	Mielestäni tätä asiaa pitäisi kehittää enemmän...	



#### 4. Ehdotuksia S2 opetuksen parantamiseksi

	Kysymykset	Vastaukset
1.	Miten S2 opetus voisi toimia parhaiten?	
2.	Milloin S2 opetus voisi toimia parhaiten?	
3.	Missä S2 opetus voisi toimia parhaiten?	
4.	Olen innoissani ja tyytyväinen S2 opetuksesta silloin kun...	



#### 5. Tuki S2 opettajille

	Kysymykset	Vastaukset
1.	Miten Espoon kaupunki tukee S2 lastentarhanopettajia suomenkielisissä päiväkodeissa?	Ole hyvä ja alleiviivaa yksi numero, joka kuvailee parhaiten mielipidettäsi Espoon kaupungin tuesta S2 lastentarhanopettajille:  1 = (huonosti), 2 = (kohtuullisesti), 3= (keskinkertaisesti), 4 = (hyvin) and 5 = (erittäin hyvin).  Ole hyvä ja selitä vastauksesi:
2.	Tuetaanko S2 lastentarhanopettajia riittävästi?	Ole hyvä ja alleiviivaa yksi sopiva vastaus: kyllä, ei tai en tiedä.  Ole hyvä ja selitä vastauksesi::
3.	Mitkä ja minkälaiset tekijät voisivat mielestäsi tukea S2 lastentarhanopettajia parhaiten?	



#### 6. Muuta..

	Kysymykset	Vastaukset
1.	Muita kehittämisideoita, joita ehdottaisin Espoon S2 opetussysteemin parantamiseksi...	
2.	Muita kehittämisideoita, joita ehdottaisin oman päiväkotini opetussysteemin parantamiseksi...	
2.	Muita kehittämisideoita, joita ehdottaisin S2 lastentarhanopettajien tukemisen parantamiseksi...	
3.	Mitä muuta haluaisit sanoa ...	

## Appendix 5 - Flyer to Kivenkolo Center visitors

**Would you like to participate in Finnish as a second language (F2) research that will likely to improve the education of your children?**

Fall, 2014



Dear Families in Kivenkolo,

We are two degree students (*sosionomi*) from University of Applied Science at Laurea Otaniemi. This fall 2014, we are conducting a thesis work from the Teaching of Finnish as second language in Early Childhood Education of Espoo: experiences, needs and ideas for future development from parents, kindergarten teachers and Service Design experts.

Our aim is to obtain information about your stories and experiences including your children's experiences **anonymously** related to Finnish as a second language teaching, F2 in a local kindergarten. Your identity will remain unknown. However, we are looking for foreign background families or individuals to participate in our research, to interview by using a story telling technique which is quick, easy and fun.

Your participation will allow for us to collect experiences telling about your F2 experiences and services received or not received. Our hope is that these story telling sessions will yield important results and grass root information that will help improve and develop the F2 service in the City of Espoo. These interview are tentatively scheduled for in the autumn 2014.

If you are interested in sharing your stories, then please contact either Polina Poletaeva or Eila Ryyänen-Mcewan. We speak English, Russian and Finnish.

With kindest regards,

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# Appendix 6 - Research permit



Espoon sivistystoimi

Tutkimuslupahakemus

1 TUTKIMUKSEN NIMI	Teaching of Finnish as second language in Early Childhood Education of Espoo: experiences, needs and ideas for future development from parents, kindergarten teachers and Service Design experts							
2 KOHDEYKSIKKÖ	Tutkimuksen suunniteltu kohdeyksikkö (-yksiköt) Espoon kaupungissa Kivenkolan asukastalo ja ympäröivät päiväkodit, joissa S2 opetusta							
3 TUTKIMUKSEN KUVAUS	<p>Lyhyt kuvaus tutkimuksen sisällöstä ja menetelmistä (max. 160 merkkiä). (Liitä tutkimussuunnitelma liitteeksi.) Tutkimus kartoittaa Suomi toisena kielen opetuksen tilannetta Espoossa käyttäen Kivenkolan asukastaloa kontekstina tutkimusaineistoa varten.</p> <p>Aineiston otanta ja keruutapa Kivenkolan asukastalon ohjaajien suosittelemat asiakkaat sekä lumipallomenetelmä lastentarhaopettajien löytämiseksi. Keruutapana tarinankerrontamenetelmä palvelumuotoilun työkaluista sekä puolistrukturoitu haastattelu ja havainnointi.</p> <p>Tutkimuksen tarkoitus  <input type="checkbox"/> Pro gradu    <input type="checkbox"/> Lisensiaattityö    <input type="checkbox"/> Väitöskirja  <input checked="" type="checkbox"/> Muu opinnäytetyö, mikä Bachelor- Sosionmi    <input type="checkbox"/> Muu, mikä?  Tutkimuksen arvioitu valmistumisaika: lokakuu 2014 </p>							
4 TUTKIMUKSEN TOTEUTUS	<p>Onko tutkimuksen kohteena henkilö (henkilöitä), jonka osallistumisesta päättää huoltaja tai edunvalvoja</p> <p>Käsitelläänkö tutkimuksessa henkilötietoja</p> <p>Muodostuuko tutkimusta tehtäessä henkilötietopohjainen tutkimusrekisteri</p> <p>Käytetäänkö tutkimuksessa jo olemassa olevien rekistereiden tietoja</p> <p>Onko tutkimus osa jotain laajempaa tutkimusta / projektia</p> <p>Lisätietoja</p>	<p><input type="checkbox"/> Kyllä    <input checked="" type="checkbox"/> Ei Jos kyllä, selvitä Lisätietoja -kohtaan, miten huoltajan suostumus hankitaan</p> <p><input type="checkbox"/> Kyllä    <input checked="" type="checkbox"/> Ei</p> <p><input type="checkbox"/> Kyllä    <input checked="" type="checkbox"/> Ei Jos kyllä, täytä myös Tutkimusrekisteritiedot -lomake</p> <p><input type="checkbox"/> Kyllä    <input checked="" type="checkbox"/> Ei Jos kyllä, selvitys Lisätietoja -kohtaan</p> <p><input type="checkbox"/> Kyllä    <input checked="" type="checkbox"/> Ei Jos kyllä, selvitys Lisätietoja -kohtaan.</p>						
5 TUTKIJATAHON TIEDOT	<p>Tutkimuksen tekijät (alleiviiva yhteyshenkilö) Poletaeva Polina ja Ryyänen-McEwan Eila, Kivenkolan asukastalon ohjaajat</p> <table border="1"> <tr> <td>Yhteyshenkilön osoite Merisaapas 1 A 02320 Espoo</td><td>Puhelin 046 8772551, 050 300609</td></tr> <tr> <td colspan="2">Sähköpostiosoite</td></tr> <tr> <td colspan="2">Organisaatio / yksikkö, johon tutkimus tehdään</td></tr> </table>		Yhteyshenkilön osoite Merisaapas 1 A 02320 Espoo	Puhelin 046 8772551, 050 300609	Sähköpostiosoite		Organisaatio / yksikkö, johon tutkimus tehdään	
Yhteyshenkilön osoite Merisaapas 1 A 02320 Espoo	Puhelin 046 8772551, 050 300609							
Sähköpostiosoite								
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	Laurean ammattikorkeakoulu Otaniemi
	Tutkimuksen ohjaaja / vastuullinen johtaja yhteystietoineen Veikko Rantanen, 09 88687550, Laurea Otaniemi

6	Arvioi, miten tutkimus hyödyntää kaupungin palvelujen kehittämistä: Ruohonjuuritason tietoa S2 palvelun käyttäjistä ja heidän kokemuksistaan, tarpeistaan, toiveistaan ja mahdollisista palvelun kehittämisideoista
7 TUTKIMUKSEN TEKIJÖIDEN SITOUMUS JA ALLEKIRJOITUKSET	<p>Sitoudun siihen, että en käytä saamiani tietoja asiakkaan, hänen läheistensä tai Espoon kaupungin vahingoksi enkä luovuta saamiani henkilötietoja ulkopuolisille, vaan pidän ne salassa. Tutkimustulokset esitän niin, ettei niistä voida tunnistaa yksittäistä henkilöä tai perhettä. Noudatan henkilötietolaissa ja muualla lainsäädännössä mainittuja säännöksiä henkilötietojen käsittelystä ja salassapidosta.</p> <p>Paikka ja aika Espoo 10.5.2014</p> <p>Allekirjoitukset ja nimenselvennykset Eila Ryyänen-McEwan</p> <p>Polina Poletaeva</p>
8 PÄÄTÖS	<p><input checked="" type="checkbox"/> Tutkimuslupa myönnetään <input type="checkbox"/> Tutkimuslupa myönnetään ehdollisena:</p> <p>Myönnetyn tutkimusluvan numero: 23/2014 <input type="checkbox"/> Tutkimuslupaa ei myönnetä seuraavin perustein:</p> <p>Pyydetään lähettämään tutkimuksen valmistuttua sähköpostitse samaan osoitteeseen kuin tämä tutkimuslupahakemus <input type="checkbox"/> Tiivistelmä <input checked="" type="checkbox"/> Koko tutkimusraportti</p> <p>Espoossa 20/5 2014 Päättäjän allekirjoitus Virpi Mattila Nimenselvennys Virpi Mattila Virka-asema varhaiskasvatuksen kehittämispäällikkö</p> <p><b>Tutkimusluvan myöntäminen ei velvoita tutkimuksen kohteita osallistumaan tutkimukseen. Tutkijan on neuvoteltava aina erikseen tutkimuskohteena olevien organisaatioiden kanssa tutkimukseen osallistumisesta ja kohteen nimen mainitsemisesta tutkimusraportissa. Tutkimuksen teko ei saa häiritä tutkimuskohteen toimintaa.</b></p>